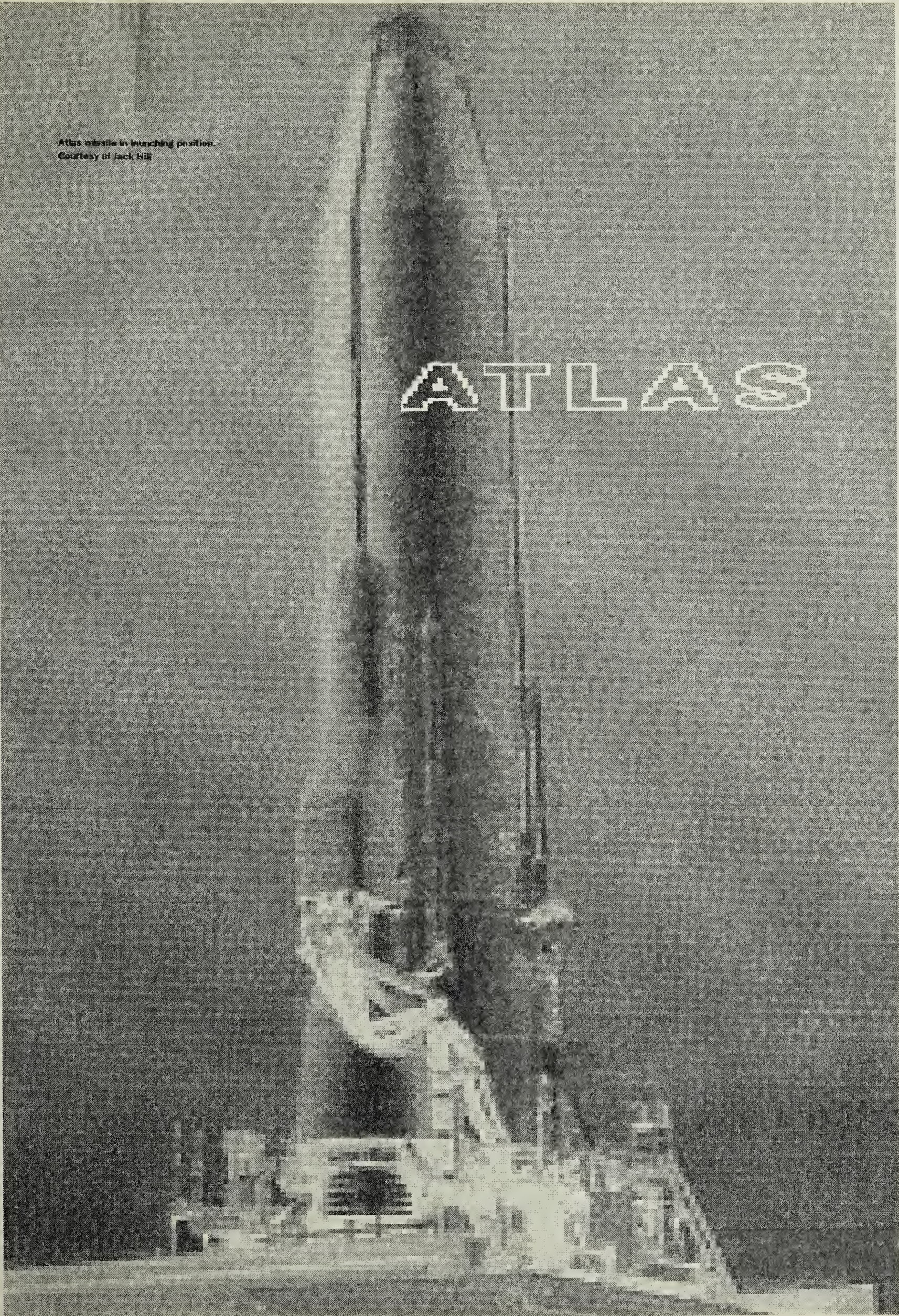




Atlas missile in launching position.  
Courtesy of Jack Hill

ATLAS





## PROJECT ATLAS

## PROJECT ATLAS

September 18-October 13, 1990

## Program

Project Atlas is an experiment to investigate and transform an artifact of the nuclear age, the Atlas missile base. The project sites are twelve obsolete and abandoned Atlas missile bases existing in the region surrounding Plattsburgh Air Force Base, at the edge of Lake Champlain and the Adirondack Mountains, in New York state. Completed in 1962 and deactivated in 1965, an underground silo was built on each site to house and launch the Atlas, the first of a series of American Intercontinental Ballistic Missiles to carry nuclear warheads. Each silo is 174 feet deep and 52 feet in diameter, with an access tunnel to a rounded, two-story, subterranean launch control center.

The same Atlas rocket put the first American in space, John Glenn; a technological paradigm of the first degree. Concurrently, with its speed and long-range capability, the Atlas ICBM became the first true instrument of global war. Its complex system of guidance and electronic communications later evolved the conception of this planet into a Global Village. Forgotten and untouched by human for nearly three decades, these sites for future archeology now seems to project an alien origin. From their present uselessness, they propel the kind of supernatural and celestial mystics that embodies the Stonehenge and the great Pyramids. They, perhaps, are the most singular remnant of our faith in human progress through the advances of science and technology. Equally, they embodies the contradictions and enigmas of the late twentieth century, an epoch that has been situated between hope and fear.

Project Atlas is a competition seeking to reach beyond mere creation of innovative designs for new and public uses of these abandoned military installations. If the arms race has truly reversed its course towards global disarmament, then these abandoned bases and other installation serves as critical metaphors for future issues on global war and

peace. Are the silos monuments to a time we have left behind, or they only the precursors to an empty and more violent time ahead? How can communities whose main support comes from the military industrial complex survive in times of de-militarization?

The intent of Project Atlas is to interpret the contradictions and enigmas of our age, at the beginning of a new decade and on the threshold of a new millenium. The project seeks to surface crucial issues in regard to our culture, industrialization and modernism, especially to challenge the our notion for beauty on pure forms and functions. Just as these missile bases are obsolete, so may be the ideologies of the societies that invented and supported them. With the ending of the Cold War, the domination by the military of advanced technologies can now be challenged with alternative applications and public practices. And as the conditions for political, economic, technological, and industrial organization continue to evolve, can these technological hardware be utilized as cultural artifacts toward new and different era?

What compelled us to invent and harness such power? Are these aims indispensable to our progress? Or, are they the final stroke of mortality for all ages? Are they in service to our survival, or are we in service to their existence? These are some of the most enduring questions at the balance between science and humanity, and perhaps we should address them once again through critical examination of these ballistic artifacts.

These are the premises and questions by which Project Atlas invited artists, architects and others to submit proposals for alteration, addition or renovation of these abandoned missile bases in physical and conceptual terms. The artifacts in transformation were to define and project potential social, cultural and aesthetic paths for change from the present to the future. Of the 140 proposals submitted, 27 works were selected for the exhibition.

**BALLISTIC CULTURE AND TARGET CITIES**

Kyong Park

The idea of initiating STOREFRONT... began a few years ago when I came across an article in The New York Times about a group of abandoned missile bases sited around Plattsburgh Air Force Base. The fact that they are now publicly owned meant that we could at last look into these facilities that were supposedly built for us yet were off-limits to us. And these monuments that once held the power of our existence should not be left to disappear without any critical examination.

Technology governs changes in human affairs while culture guards continuity. Hence technology is always disruptive and creates crisis for culture.  
—Daniel Bell, "Technology, Nature and Society" in *The Winding Passage: Essays and Sociological Journeys 1960-1980* (Cambridge, Mass., 1980)

What compelled us to invent and harness such power? Are these aims indispensable for our progress toward the reputed age of immortality, or are they the final stroke of mortality for all ages? Are they in service to our own survival, or are we in service to their existence? These are some of the enduring questions at the balance between science and humanity, and perhaps we should address them once again through critical examination of these ballistic artifacts.

Gravity pressed us down like worms, but a gravity-free environment would make the poor equal to rich, and be freer than a bird in flight.  
—Konstantin Tsiolkovsky, *Free Space* (1883)

Technology, the means that manifested these missiles, idealized the deliverance of unlimited goods and knowledge to its believers. And to many others the spirit of aeronautics personified a flight of liberation from the ever-present social hierarchy that weighed upon terrestrials like gravity. Together, these aspiring ideologies lead man to speculate that perhaps the conquest of outer space will lead to the resolution of earthly struggles.

We must master the highest technology or be crushed  
—V. I. Lenin, (1919)

However, practical and strategic application of technology ultimately prevailed over its ideological aspirations, as the funding for its development came

increasingly from the military. Its products became the very measure of the success, legitimacy and security of the political and national entity, and therefore Sputnik was a crucial event in consolidating state sponsorship for research and development of technology for military use. Soon the prestige and reputation of nations depended on the magnitude, accuracy, distance and reliability of ballistic arms, particularly the ICBM, to build military industrialism into the largest single economic structure of this century. By enlisting society to largely dedicate itself to the research and development of nuclear and ballistic arms, the military became the dominant user of the technology. The public hardly controlled the directions and purposes of the technological pursuits; they were only a mass to be persuaded. In complying, the public was allowed to use various technological fall-outs and by-products that had already lost their innovative quality and value for the military use.

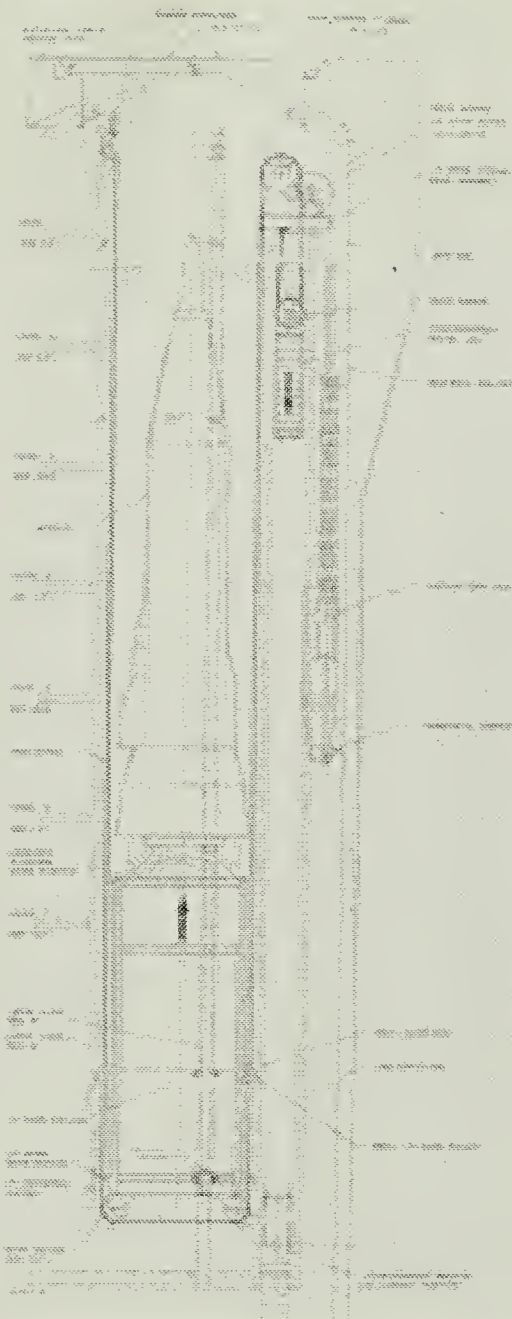
The panel [Technological Capabilities Panel of 1954 included James F. Killian, president of MIT; Lee A. DuBridge, president of Caltech, James B. Fisk, later president of Bell Labs; James Phinney Baxter III, president of Williams College; Edwin H. Land, inventor of the Polaroid camera] recommended the highest national priority for the USAF ICBM program, an IRBM suitable for land or shipboard launch, rapid construction of a distant early warning (DEW) line in the arctic, a strong and balanced research program on the interception and destruction of ballistic missiles, a greater application of science and technology to methods of fighting peripheral wars, and especially an increase in intelligence capabilities.

—Walter A. McDougall, *...The Heavens and the Earth: A Political History of the Space Age*, New York (1985)

Under these conditions, Technocracy, the management of society by technical specialists and industrialists became the dominant polity that made both capitalism and communism more irrelevant and less distinguishable. For North America, the transformation of the cultural and physical landscape by the technocracy of ballistic weapons is far more encompassing than we are aware. Depopulation of urban cores to lessen massive deaths, dispersion of population to the suburbs to increase survival rates, the building of interstate highways for the mobility of arms and population, and open space and slum clearance for

## PROJECT ATLAS

Section of Atlas missile silo with the missile in place.  
Courtesy of Dr. Donald Ryan



firebreaks and evacuation lanes were some of the many security measures that played a major part in the erosion of the finite definition of the city since the Second World War.

Mitsushige, who was a photographer for the Hiroshima newspaper Chungoku Shimbun, found himself confronted at one point in his wandering with a street car full of dead people. "I went up to it and looked inside . . . It was jammed with people. They were all in normal positions, holding onto streetcar straps, sitting down still, just the way they would have been before the bomb went off. Except that all of them were leaning in the same direction—away from the blast. And they were all burned black, a reddish black, and they were stiff."

—Jonathan Schell, from the Introduction to *At work in the field of the bomb* by Robert Del Tredici, New York (1987)

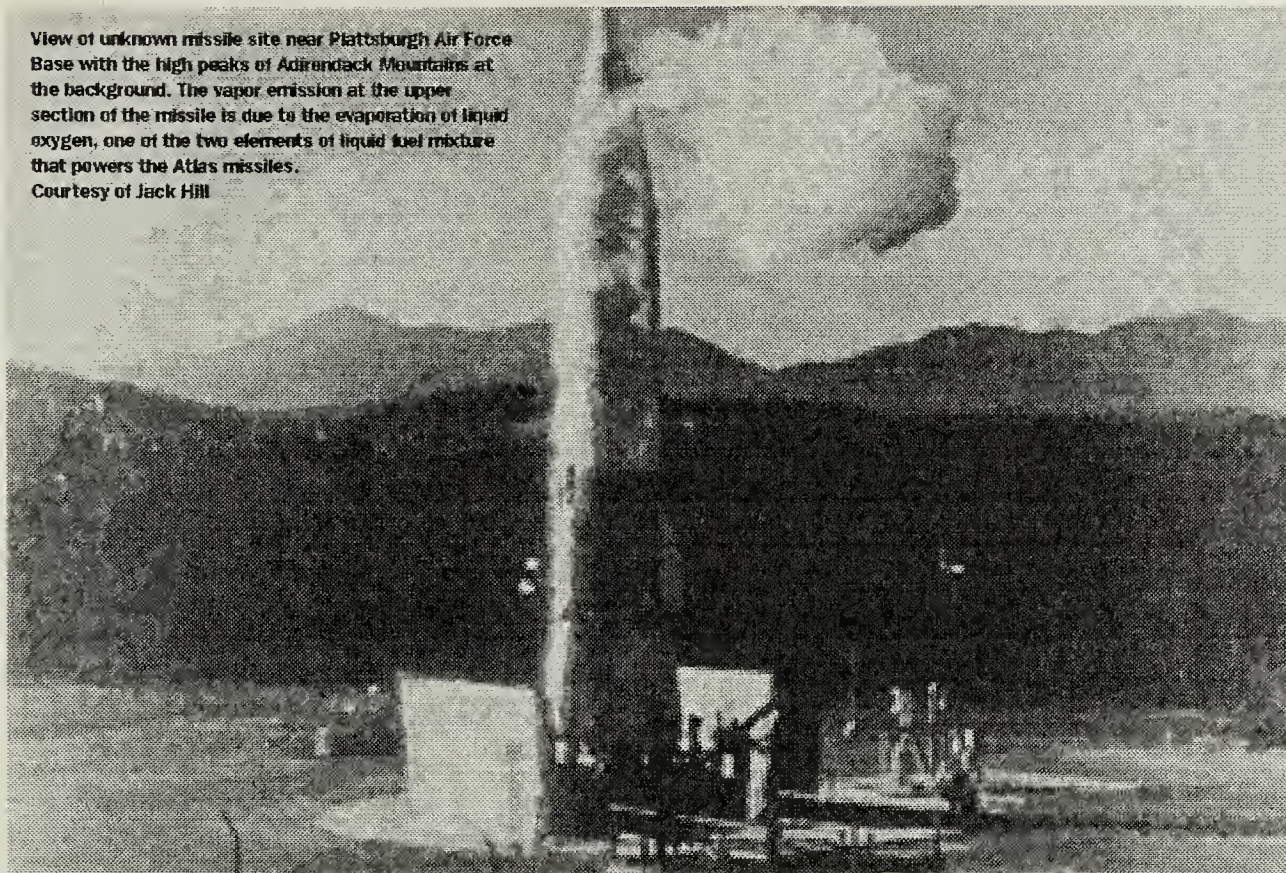
Congregation with other humans implied the potential to become a target, and self-sufficient habitation was life insurance for doomsday. Physical proximity was unwanted, and permanent settlement suggested insecurity, all antithetical to the traditional form and sense of community, prescribing a nomadic way of life for our future. We are now more self-sustaining, individualized, alienated, fragmented, dispersed and mobile than ever before. And these may be the precise requirements to inhabit outer space, to live in a community of crews, drifting inside a self-sufficient capsule in a vast space, so separate and so distant from the nearest community of the same kind.

We are dealing with the death of optimism, rather



## STOREFRONT FOR ART AND ARCHITECTURE

View of unknown missile site near Plattsburgh Air Force Base with the high peaks of Adirondack Mountains at the background. The vapor emission at the upper section of the missile is due to the evaporation of liquid oxygen, one of the two elements of liquid fuel mixture that powers the Atlas missiles.  
Courtesy of Jack Hill



than the death of art. All of that engineering elegance and efficiency born of rational, industrial solutions that was to make a better world . . . did not bring a new dawn. It brought an era of more gigantic problems in the nature of life and survival than history has even known . . . Next to the reality that produces an ABM, the monuments of architects often seem like arbitrary toys.

—Ada Louise Huxtable, *A Bizzare Monuments to Non-Architecture* The New York Times, 14 December 1975

Even if doomsday never arrives, the radiation particles and their waste will long challenge our terrestrial habitability. This war against our environment is something that we, the allies and the enemies of all other wars have mutually constructed and are equally responsible for, potentially transforming this planetary shelter into our collective enemy. Together with various social conditions during the Cold War, the ballistic missile developments may once again serve their original mandate, the exploration of outer space. But this time they may become our habitat.

Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft

from those who hunger and are not fed, those who are cold and are not clothed.

This world in arms is not spending money alone. It is spending the sweat of its laborers, the genius of its scientists, the hopes of its children.

The cost of one modern heavy bomber is this: a modern brick school in more than 30 cities.

It is two electric power plants, each serving a town of 60,000 population. . . .

We pay for a single fighter plane with a half million bushels of wheat.

We pay for a single destroyer with new homes that could have housed more than 8,000 people. . . .

This is not a way of life at all, in any true sense. Under the cloud of threatening war, it is humanity hanging from a cross of iron.

—Dwight D. Eisenhower, *Chance for Peace*, 1953

But we are still inhabitants of this planet and possessors of technology. And if the recent global changes of political boundary will transfer the means to conduct world conflicts and collaborations from military to economic forces, then the ideologies and institutions of military industrialism will also be obsolete. Consequent possibilities are phenomenal opportunities for reconsideration of the present social structures and ideologies, and perhaps the



## PROJECT ATLAS

reacquisition of control over our destiny from the futility of the nuclear age. Equally, ballistic missiles stripped of nuclear arms can symbolize a liberation of technology from the military, implying that technology can still be a positive instrument for social betterment.

When she was 12 years old, Sadako Sasaki contracted leukemia from earlier exposure to the atomic bomb. She did not wish to die. She refused all painkilling medication and took literally a Japanese proverb that says, "If you fold 1,000 paper cranes, you will get whatever you wish." She folded 645 of the tiny birds before she died.

—Robert Del Tredici, *AT WORK IN THE FIELD OF THE BOMB*, New York, 1987

Thus our future is bound to the question of how we will cope with our past. Perhaps these ballistic missiles are a means to expose some of the predicaments, and ask how we can transform the contaminated landscapes and toxic wills of the past. In my mind, this is the basic notion of Project Atlas. Through the transformation of an artifact, art and architecture can intervene to shape or contradict the forces that make the world, and define new and positive agendas.

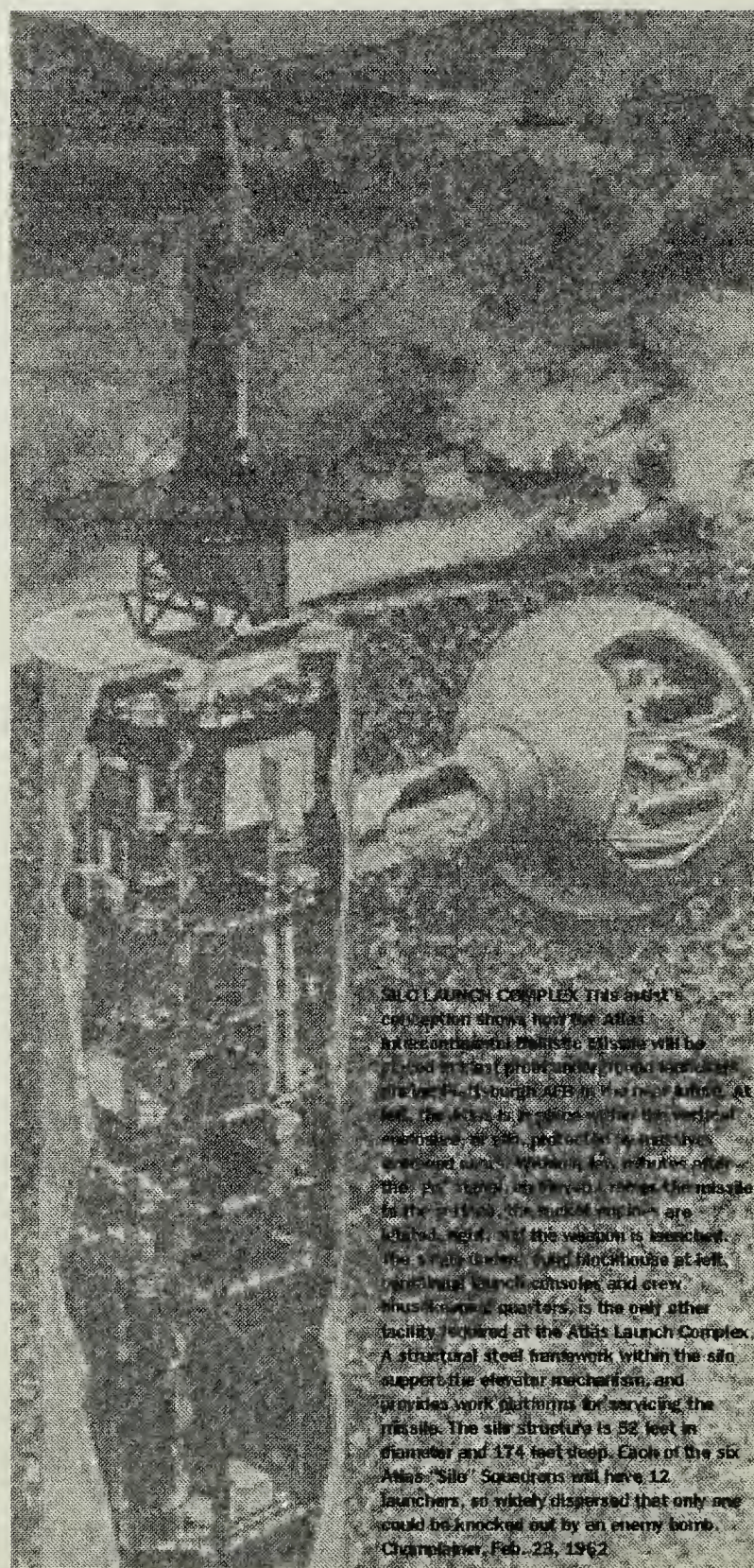
## OUR SILENT SILOS

R. D. White.

October 1962: President John F. Kennedy orders the Soviets to remove their medium range missiles from Cuba after U.S. intelligence detects their deployment. A blockade of the island ensures and the world is brought to the brink of nuclear war in the worst superpower confrontation to date.

In the Adirondacks, Air Force technicians of the 556th Strategic Missile Squadron hurry to make the last few missile sites operational. The Atlas InterContinental Ballistic Missile (ICBM) was America's newest strategic weapon capable of delivering a nuclear warhead to a target 6,000 miles away. The missiles, housed in 12 sites around their Plattsburgh Air Force Base headquarters, were the only underground silos ever built east of the Mississippi River. Fortunately, the Russians removed their rockets and everyone breathed easier.

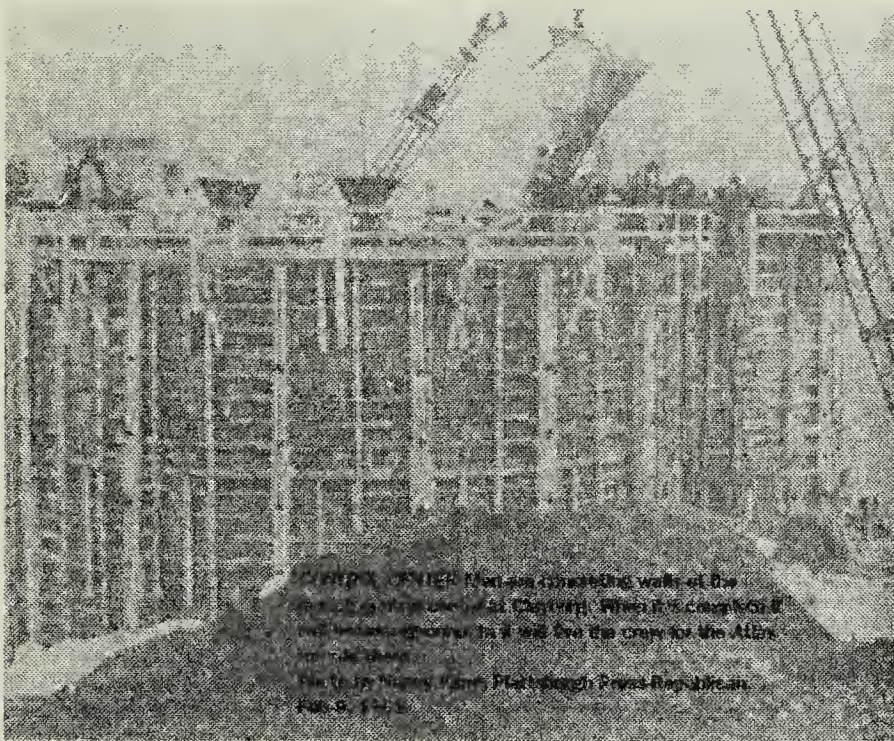
The \$300 million dollar construction and operation of the twelve North Country sites, ten in New York State and two in Vermont, made it one of the largest projects undertaken in the region, employing some 770 workers, exceeded only by the building of the St. Lawrence Seaway. Seven of the



**SILO LAUNCH COMPLEX** This artist's conception shows how the Atlas InterContinental Ballistic Missile will be moved in this underground launch complex. The Plattsburgh AFB is the main launch site. At left, the Atlas is moved from the vertical position to the horizontal position by a large crane. At right, the missile is launched. The silo structure is 82 feet in diameter and 174 feet deep. Each of the six Atlas "Silo" Squadrons will have 12 launchers, so widely dispersed that only one could be knocked out by an enemy bomb. *Champion*, Feb. 23, 1962



STOREFRONT FOR ART AND ARCHITECTURE



CRANE OF HIGH RISES, CRANEING WALKS OF THE  
SILOS IN THE AIR. AT PLATTSBURGH, WHEN IT COMES TO  
THE SILOS, THERE IS A LOT OF CRANEING. THE CRANE FOR THE ATLAS  
IS THE ONE.  
Photo by Nancy Kline, Plattsburgh Press-Bulletin,  
Feb. 6, 1965.

New York sites were within the Adirondack Park; Au Sable Forks, Chazy Lake, Clayburg, Harrigan Corners, Lewis, Sugarbush and Willsboro.

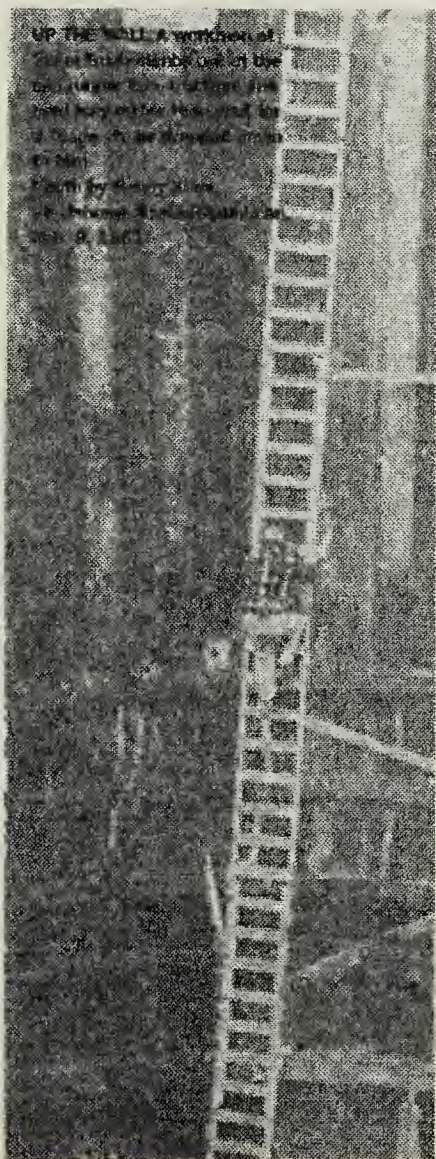
Construction began in July of 1960. Each site consisted of a hardened concrete silo 174 feet deep and 52 feet wide, with an access tunnel to a rounded, two-story control center. Two massive, lead-filled doors covered the top of the silo and the internal metal framework within the concrete shell. Both the silo and the control center were mounted on giant springs to absorb the shock of anything but a direct hit by an atomic bomb. More than 8,000 cubic yards of concrete were poured into each location.

Richard C. Beaulieu of Massena, the construction foreman who sunk the footings and poured the forms for six of these sites, recalled some of the problems encountered in the construction. At the Au Sable Forks site, the concrete for the control center was poured at 30-below zero and came out in lumps. Next spring when the forms were removed, it was full of "ratholes," so the concrete was blown up and everything had to be repoured.

Inter-site communications systems, containing 208 miles of cable, were installed by New York Telephone to link the remote silos with their central command post in Plattsburgh known as the "Black Hanger." A liquid oxygen plant manned by 25 airmen was built to the northwest of the flight line at Plattsburgh Air Force Base. The oxygen and nitrogen for the missiles was stored in giant 28,000 gallon vacuum tanks at hundreds of degrees below zero. A fleet of trucks transported the liquids to the sites, to replenish the supply that, no matter how tightly sealed, was constantly dissipating into the atmosphere.

By the fall of 1964, Defense Secretary Robert S. McNamara began a phase-out of the first generation missiles, like the liquid-fueled Atlas and Titan I. The Titan II and Minuteman used more storable solid fuels, which did not evaporate constantly, and were much less expensive to maintain. Rather than convert much of the outdated hardware in the silos for use with the newer missiles, a command decision deactivated the Plattsburgh silos leaving our ground-based missile force entirely in the western United States. On April 14th, 1965 the last Atlas was trucked back to California for use in the Air Force's own space program. The 556th Strategic Missile Squadron was deactivated on June 25th, 1965. The silos had been operational for about 30 months.

The Air force took very little away with them, turning the silos over to the General Services



UP THE WALL A WORKER OF  
THE SILOS IN THE AIR. AT PLATTSBURGH, WHEN IT COMES TO  
THE SILOS, THERE IS A LOT OF CRANEING. THE CRANE FOR THE ATLAS  
IS THE ONE.  
Photo by Nancy Kline, Plattsburgh Press-Bulletin,  
Feb. 6, 1965.



## PROJECT ATLAS

Administration for disposal. A few were turned over to salvage companies who ripped out whatever they could of value. With the sump-pumps shut off, the silos began to fill with ground water, and today all but one are completely filled. Several were taken over by town highway departments, who used the two Quonset huts located at each site for garages and maintenance work.

Excerpted from the article under the same title originally published in Adirondack Life, January/February 1988. Courtesy of the author and Adirondack Life

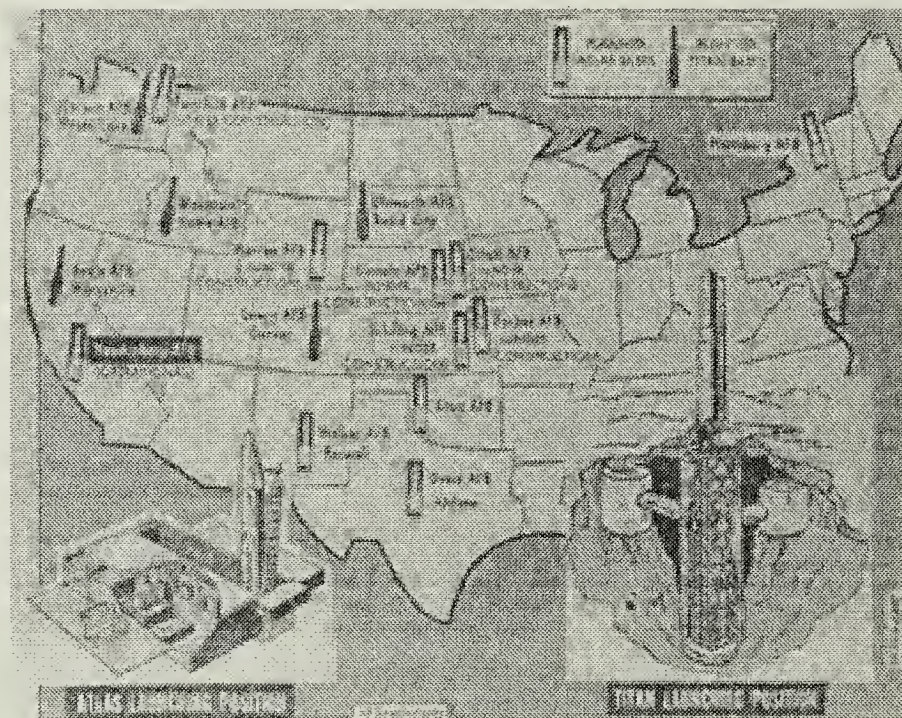
### A BRIEF MILITARY HISTORY OF THE LAKE CHAMPLAIN VALLEY

The Lake Champlain Valley has had a long and varied military history. This 138 mile long lake joined with Lake George and the Hudson River to its south in New York State of the United States, and the Richelieu and St. Lawrence River to the north in Quebec, Canada forms one of the most important inland waterways in North America.

Prehistorically, the Native American tribes of the Algonquin and the Iroquois used the waterway for transportation and between them the land was disputed. It is understood that they set a boundary between their lands at Roche Region, now known as Split Rock in Essex, NY. In 1609 the French explorer Samuel de Champlain first discovered the Lake which today bears his name

Next came the struggle to control the area and its lucrative fur trade. Iroquois along with Dutch and English settlers sent raiding parties north to the French settlement, and the French with their Algonquin allies sent war parties south to discourage settlements and keep the Valley free for the French. In 1731 the French first established a military outpost at Chimney Point, VT and within a year a stronger fortification across the Lake at Crown Point, NY. Fort St. Frederic, as it was known, was built on a rock and had high thick walls made of limestone. The high tower or Citadel inside the fort was built strong enough to resist bomb shells. The fort was well stacked with 15th Century war surplus cannon and balls from the old Country. Twenty-five years later the French further strengthened their hold on the Valley and built another fort at Ticonderoga, NY. The British countered by building Fort William Henry at the South end of Lake George. The skirmishes grew in size. In July of 1758 the British General Abercrombie assembled over 15,000 troops, at this time the largest ever in North America, and tried to capture the French fort at Ticonderoga. Some 2,000

**ATLAS AND TITAN LAUNCHING POSITIONS** They are the sites selected to harbor America's super-weapons of the present and future-the Atlas and Titan intercontinental missiles. (The illustration at bottom left depicts an installation of Atlas that lifts a horizontally laid missile up for launching, after protective roof is opened. This particular installation type was commonly known as the "coffin")  
Plattsburgh Press-Republican, Feb. 10, 1960





## STOREFRONT FOR ART AND ARCHITECTURE

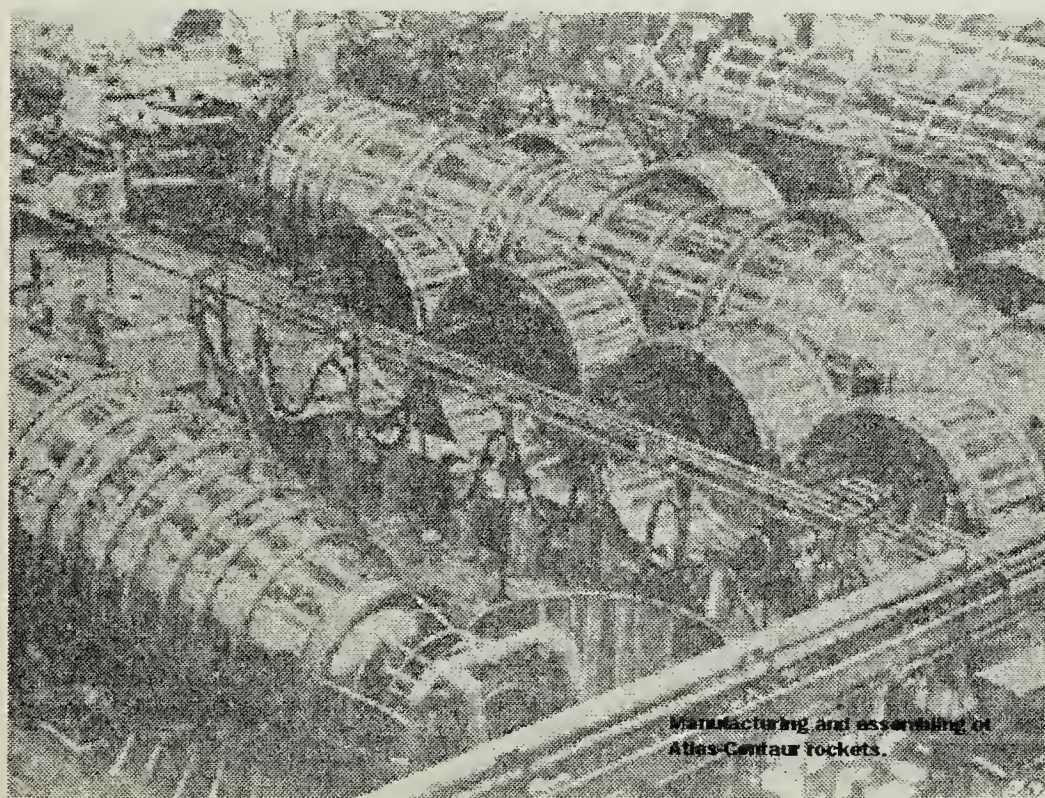
died in a vain attempt to storm the breastworks and to this day the Scottish Highlanders of the 42nd Black Watch count this a one of their bloodiest engagements. A year later the British came North again. The French, who were vastly outnumbered, destroyed their own forts and left the field. The British, now in control of the main route to Canada, built the largest fort in North America at that time at Crown Point. Before it was finished the French and Indian War came to a climax in Canada with the fall of Quebec and the capture of Montreal.

Conflict next broke out on May 10th, 1775 when Ethan Allen and the Green Mountain boys of the American revolutionary forces captured the British outpost at Fort Ticonderoga. Meanwhile the British had Boston under siege. Cannon from the newly captured fortifications at Crown Point and Ticonderoga were transported during the dead of winter to the city over 300 miles away. With the arrival of the large guns from the Champlain Valley the British took to their ships and the siege was lifted. During the next few years the Champlain Valley was to be the scene of many armed conflicts in the War of Independence.

Again in the War of 1812, the second war of independence from the British, the Champlain Valley saw many conflicts. After a thunderous and bloody cannonade at the Battle of Plattsburgh Bay in September of 1814, Commodore Macdonough of the American Navy received the surrender of the British fleet on the Lake. The last time that big guns ever

fired on Lake Champlain was on October 2nd of the same year when the gunboats "Saratoga" and "Confiante" made a salute to the city of Burlington, VT. as they sailed south to storage at Whitehall, NY. In order to strengthen the American position against the British along the Canadian border on the Lake, in 1816 Fort Blunder was begun. It is so called because in 1818 the American officers in charge of construction found the Fort was built on Canadian soil. Construction immediately ceased, and it wasn't until 1843 that Fort Montgomery was begun on the same site after the Webster-Ashburton Treaty made the necessary boundary adjustment. The fortification was finally abandoned in 1870 and was dismantled in 1908.

In 1838 the United State government erected extensive army barracks in the city of Plattsburgh, NY. Troops from this point were sent into combat in Mexico in 1846 and to Cuba in 1898. In 1915 the first series of training camps for officers, the "Plattsburgh Idea" promoted by Major Gen. Wood, was developed at the reservation. Training essential to a competent officer of the line, such as trench warfare and the science of artillery and infantry, was crowded into a three month period. In 1939, 40,000 men participated in "war game" or military maneuvers that were held by the U.S. First Army in the vicinity of Plattsburgh. A naval training station opened in 1944 with 2,000 apprentice seamen participating. In June of 1945 the Plattsburgh Barracks were turned into one of the finest military

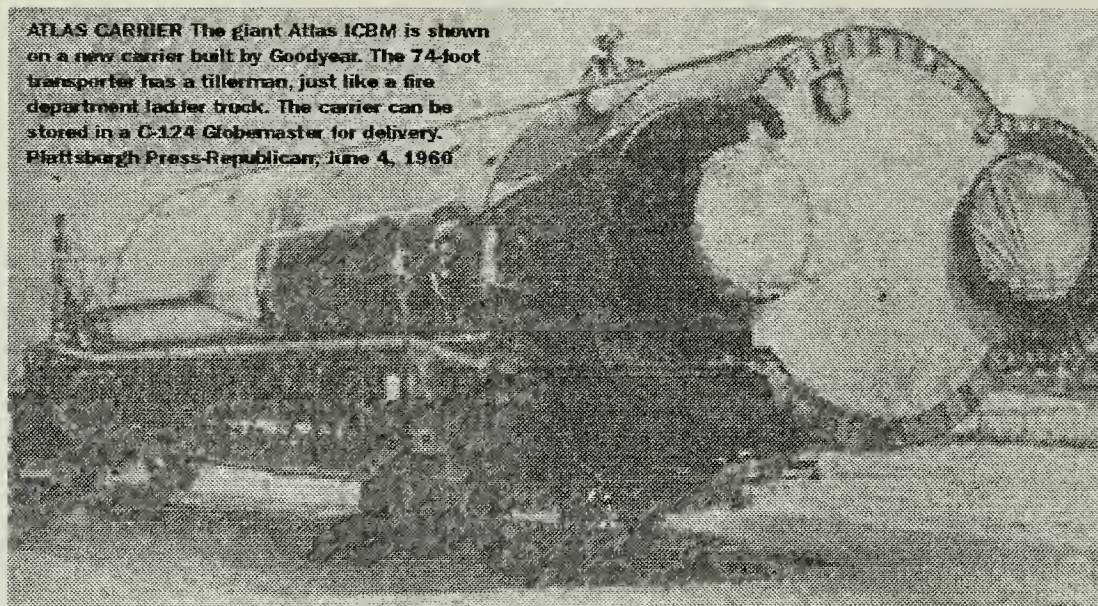


Manufacturing and assembling of Atlas-Centaur rockets.



## PROJECT ATLAS

**ATLAS CARRIER** The giant Atlas ICBM is shown on a new carrier built by Goodyear. The 74-foot transporter has a tillerman, just like a fire department ladder truck. The carrier can be stored in a C-124 Globemaster for delivery. *Plattsburgh Press-Republican, June 4, 1966*



convalescent hospitals in the U.S. A U.S. Air Force Base was established in February of 1952 in Plattsburgh and it included the old military installation. Since 1955 there have been established a Strategic Aerospace Division, a Bombardment Wing, an Air Refueling Wing, a Strategic Missile Squadron, a Combat Support Group, and a Medical Group at the base.

The history of this strategic inland waterway includes the use deployment of armaments as simple as bows and arrows to some of the more sophisticated nuclear weaponry of our time. With the end of the Cold War, numbers of United States military bases, personnel and weapons have been cut back. There is no clear future for the base at Plattsburgh as it too may become a testimony to the military history of the Lake Champlain Valley.

—Jim Kinley

Essex County Historian and Director of Adirondack Center Museum, Elizabethtown, New York.

#### AN EARLY MORNING TEXT ON 'ATLAS OBSOLETE'

David Hanawalt

The term, 'built-in obsolescence,' applies to what? "Everything" it would seem. Everything has both a built-in capacity to wear out and a built-in capacity to become obsolete. In our time, the tendency to become obsolete has far outstripped the tendency to wear out. On the one hand this leaves us with functional objects and systems which are no longer functional, a moronic statement that, nevertheless, is modern civilized fact. Stereos, Televisions, Typewriters, Ships, Cars, Buildings, Motors, Medicines, Pesticides, Bombs, Teaching Methods, Financial Products, Genetically altered bacteria. On

the other hand, we have given ourselves a system of object Nostalgia that seems to have replaced religious icons; for the love of a broken truck.

My parents liked to tell me the story of visiting a military air base with 360 aircraft sitting quietly in rows, obsolete the day they came off the production line. While the phenomena of rapid obsolescence (by history's standard) is pervasive, it is more spectacular in the case of military paraphernalia. The expenses, technology, and effort discarded make for such absurd tales and images that they bring wonder to the eyes of a child; the obsolescence is a story unto itself. If it were only for children, it might comprise a fairy tale (with a moral, no doubt). Since the phenomena belongs primarily to the adult world (toys being a significant, notable exception), we may interpret humongous military obsolescence as one of the potent mythological phenomena of our time. In this respect, the abandoned Atlas Missile silos are shrines to that myth; representative locations of our national spiritual heritage. Perhaps more so than a church.

Borders between countries were invented some centuries ago, firmly instituted, and are now in the process of erosion: a type of Obsolescence. Indications are in both conspicuous and surreptitious fields. Economic flow of goods, services, and contraband. Flow of the Arts with traveling dance companies, publications of anything and everything in several languages, and television. In 'Military Science' there remain intact concepts of border, such as the covert operation; treating the border of a country much like a cell wall into which the intruder is injected. The Missile is of the same conception, very much like a syringe. Concurrently, in the case of the missile in "Military Science," there is an indication of the erosion of borders and an eventual





STOREFRONT FOR ART AND ARCHITECTURE

Mapping of the Global Network. External to the missile's destructive capability, the precise science of missile guidance relies on mapping the globe: geographically, magnetically, in rotation, with respect to the sun, stars, and moon. This poetic is secretly imbedded in this blundering, destructive missile beast; a source of potentially infinite spiritual and cultural energy.

NOTES ON A CHANGED WORLD

Marc Hecker

Dispersion and mobility, however, became important





## PROJECT ATLAS

factors in planning programs of the early postwar years. Lois Craig illustrates in *The Federal Presence* [1978] how the government influenced the physical environment of America through programs that satisfied defense needs but also embodied other public values as well. One such program was the National Defense Highway System. Justified in the civilian realm as providing increased convenience, mobility, and economic efficiency, it also facilitated the military program of strategic target dispersal. The population, infused with the pioneering myth and encouraged by the Mortgage Subsidies Act, the

Top of the round concrete missile site with the doors closed.  
Clayburg, New York, 1969  
Photo by Kyong Park



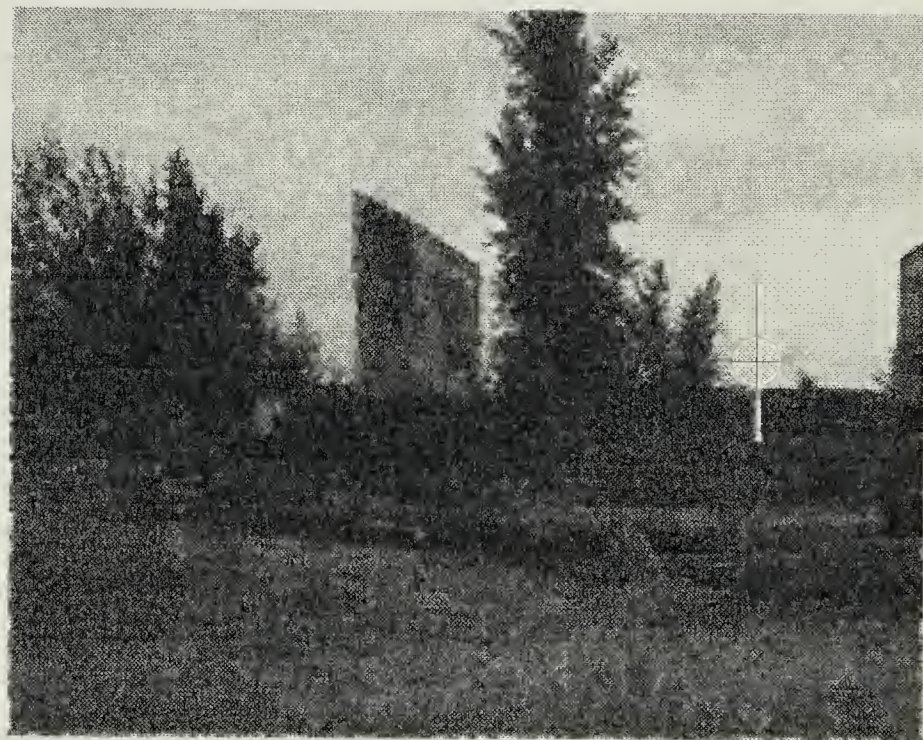


## STOREFRONT FOR ART AND ARCHITECTURE

Housing Act of 1949, and postwar prosperity, began relocating in previously underdeveloped regions. This migration, made possible only by the highway network, spawned the suburban environment and concomitant social fabric characteristic of America today. Suburbia, which defines so many aspects of the American "bomb culture," has been determined as much by the strategic dispersal of civilian and military targets as by notions of social betterment. Even in planning such developments as shopping malls, the criteria determining location, construction, and facilities also included considerations that would allow the malls to serve as "defense welfare" centers following a nuclear attack.

The legacy of this defense-motivated policy has been the dissolution and consequent decay of the city. Historically the vessel of the public realm, the city once embodied a kind of organized remembrance through its structure of finite definition. Though traditionally associated with defense and configured as much by the military engineer as the philosopher, the city was the place where people might gather to constitute the body politic of the state. The city's finite definition gave value to the permanence and continuity of the public realm thereby permitting the transcendence of individual existence. It offered memorial content and the possibility of preservation as a means of projecting the past into future.

The fracturing and disintegration of the city that began with the perfection of ballistics and the advanced development of roads and railways has been greatly accelerated by the defense requirements of the nuclear age. As the only means of passive defense against nuclear attack dispersion has become the tenet of an anti-urban ideology, causing the erosion of the public realm through direct and indirect means. The city can no longer be the site for immortality. It is now setting for organized suicide, identified as the ground-zero target. Endless expansion and maximized dispersion understood to be the only method for minimizing the damage of a single nuclear bomb; they are the sole mean of survival. As the spatial dimension of war expanded, however, the temporal dimension decreased. The needs of the military have come to exceed the available environmental resources: the limits of warfare have been extended into space, but target dispersal is limited by the boundaries of the state. Today the number and power of nuclear weapons has outstripped the ability of the military to defend targets through dispersion. An environment configured on the basis of defense has become irrelevant; the anti-urban ideology that caused the





## PROJECT ATLAS

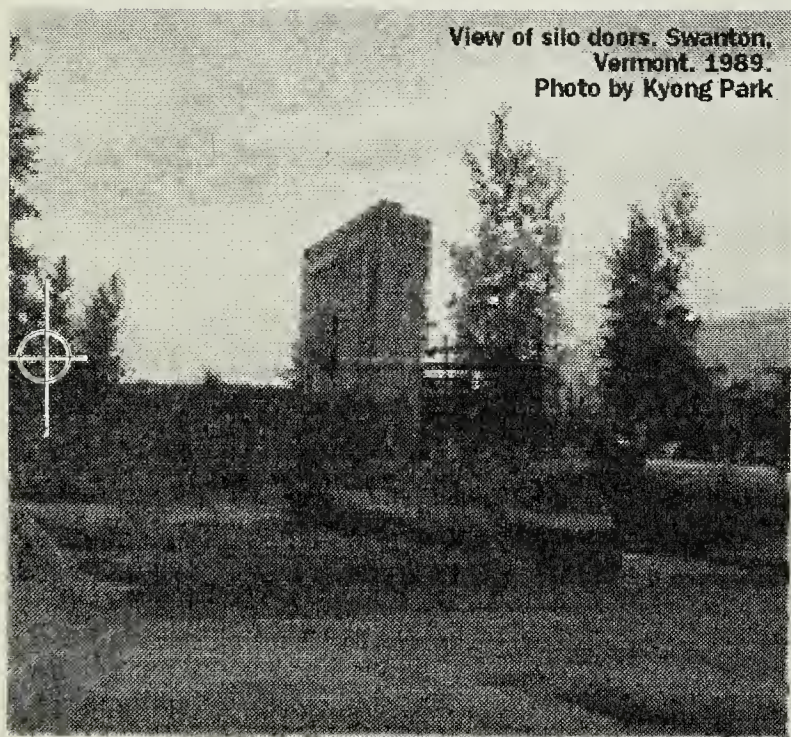
dissolution of the finite city has become impotent in the face of current nuclear arsenals. This erosion of the finite city, of organized remembrance and public life, signifies in every sense a crisis in the common world.

This crisis can be understood through the profound effects of military objects and related hardware on the nature of civilian life. In the present day a process has been set in motion, the result of which is unpredictable; uncertainty has become the principal characteristic of human affairs. The denial of a certain future has belied the possibility of transcendence. In *The Fate of the Earth* [1982] Jonathan Schell points out that the present is a fulcrum on which the future and the past are balanced. If the capacity to believe in the future is lost, any relation to the past must also fall away. In the nuclear age the future has collapsed into the present with the threat of imminent destruction. The ability of humanity to cancel its own future and the concomitant loss of certainty have radically altered the human condition.

The loss of a certain future brought about by nuclear weapons has locked objects into the present, denying them any possible relation to the pattern of cultural succession and rupturing their relation to precedent and their reason for permanence. An artifact as an end in itself is meaningless in the absence of any permanent measures or values that can precede and outlast its production. The end has collapsed into the means; objects can no longer be valued for their intended use but only as means to further production. The process of production thus becomes the only constant that can have value. The durable object is rendered obsolete, its conservation being a greater impediment to the cycle of production and consumption than its destruction.

The incertitude of the present moment, suspended between an irretrievable past and a precarious future, undermines the purpose of any lasting endeavor such as architecture. When doubt is cast on the simple possibility of living out one's own life-let alone the possibility of an enduring cultural succession-the culture value of the architectural object become questionable. If architecture can no longer exist as a resolution of memory and possible future, any pretense to the building of architecture as such must be suspect.

The current fascination with ephemeral imagery, the primacy of the process of building over any ideal or permanent architectural product, and the loss of belief in building for posterity, are all symptomatic of this crisis. Unable to sustain permanent values, current architecture attempts

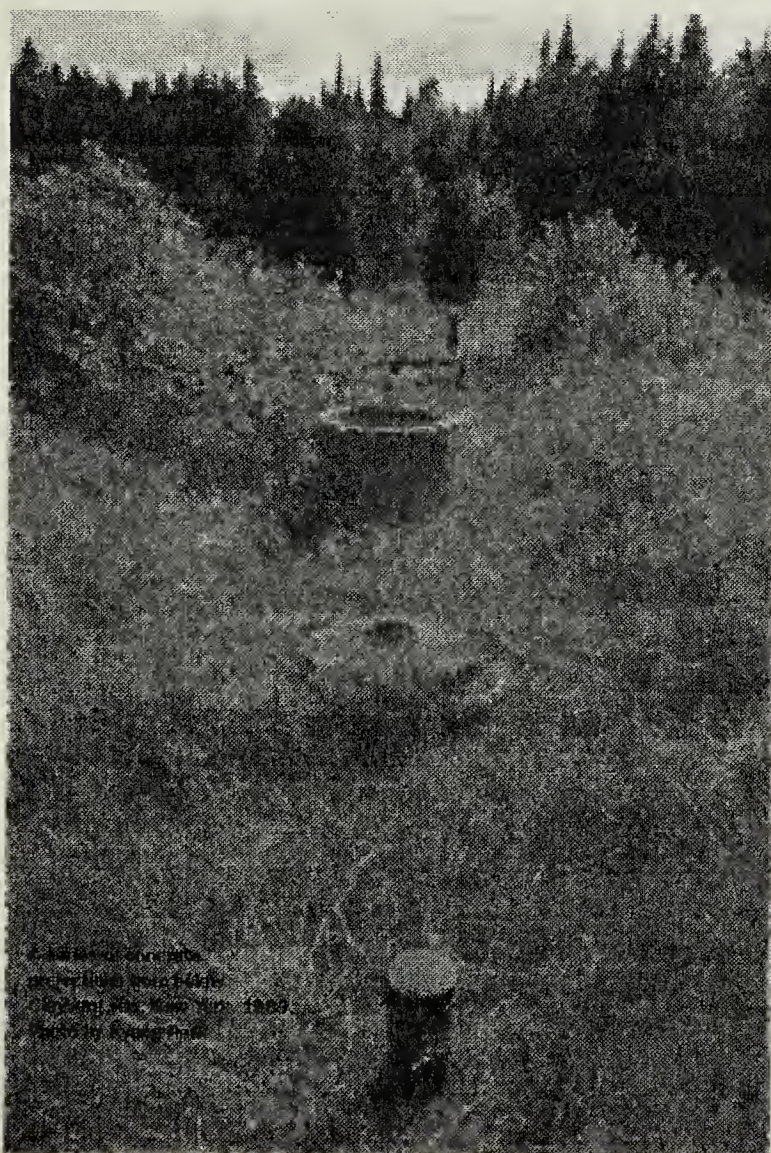
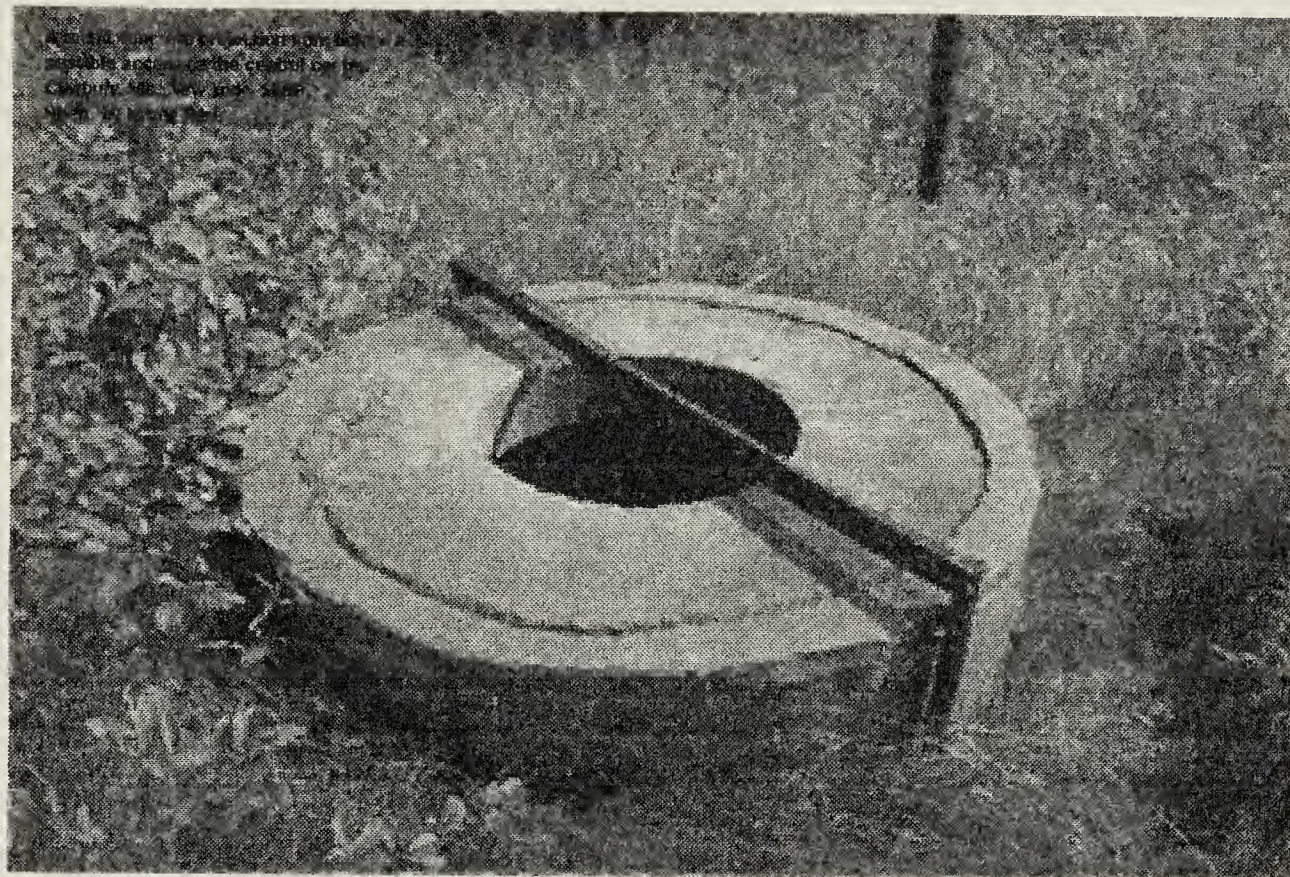


View of silo doors. Swanton,  
Vermont. 1989.  
Photo by Kyong Park





STOREFRONT FOR ART AND ARCHITECTURE



either to signify value through the representation of buildings with historical pedigree or to achieve definition using little more than advanced building technology.

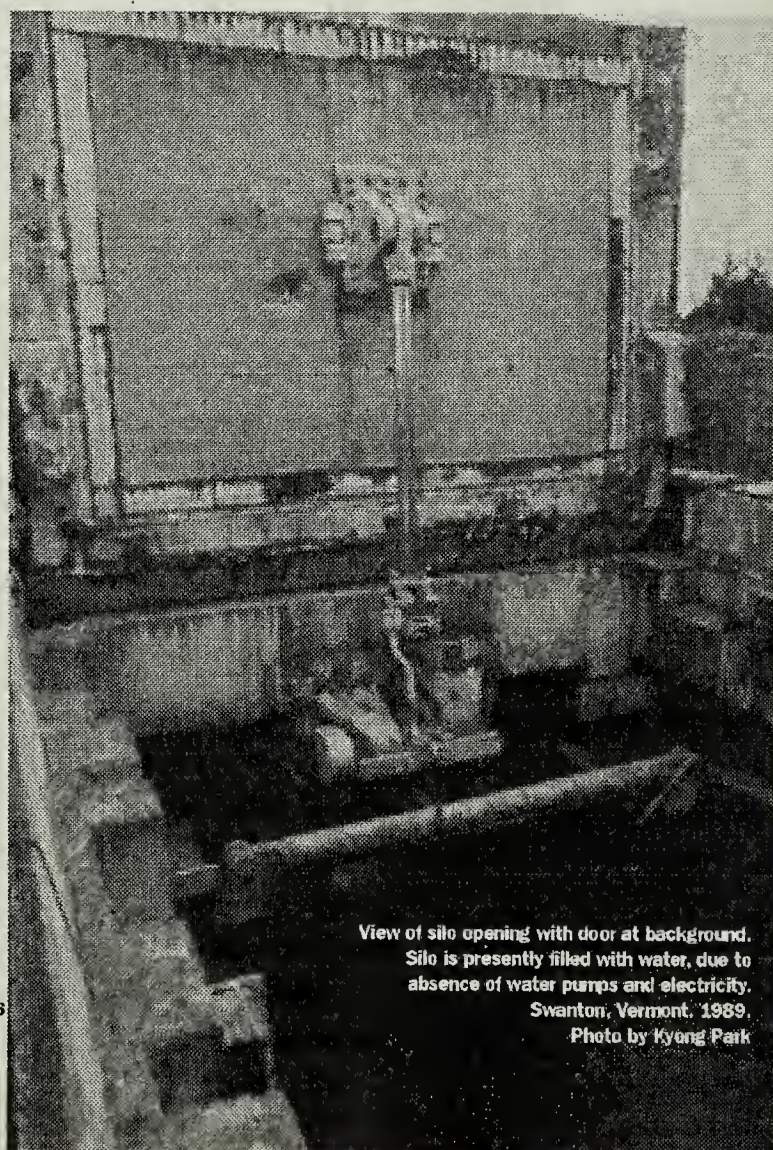
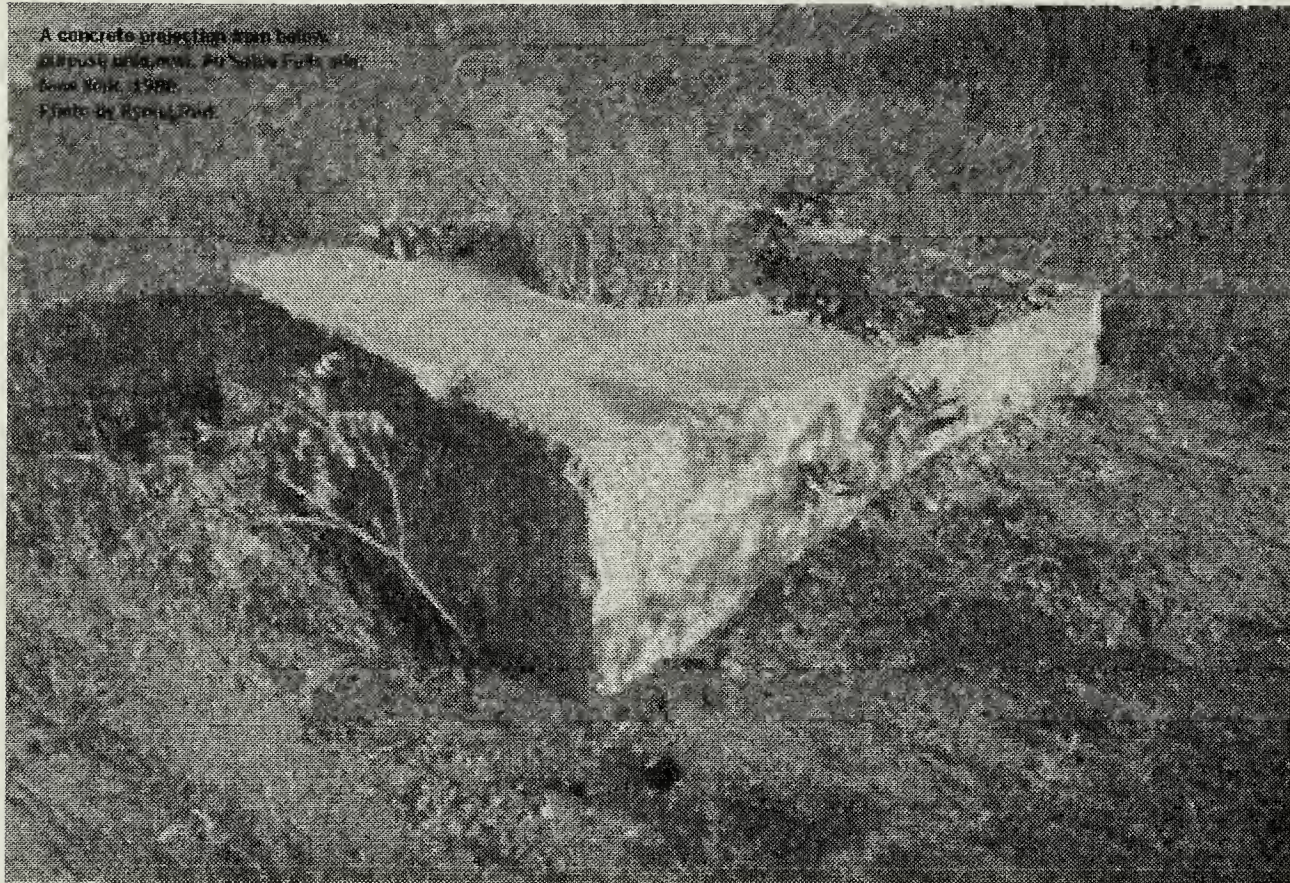
The uncertainty of the current condition, caused by the futility of nuclear weapons, threatens the complete paralysis of culture. Unless the future is restored to us, the only meaningful program for any cultural artifact, including architecture, is to expose the eschatological dilemma of the age.

Excerpt from Notes on a Changed World, Prospecta 21, 1984. Courtesy of the author





PROJECT ATLAS





Inside of Atlas missile silo, Swanton,  
Vermont, 1986.  
Courtesy of R. D. White

PROPOSALS



PROJECT ATLAS

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Sargent Gardine/  
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Peter Lang

James Langford  
with Sandi Hubbard

David Leclerc  
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Office of Original Zone:  
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**Fundings**

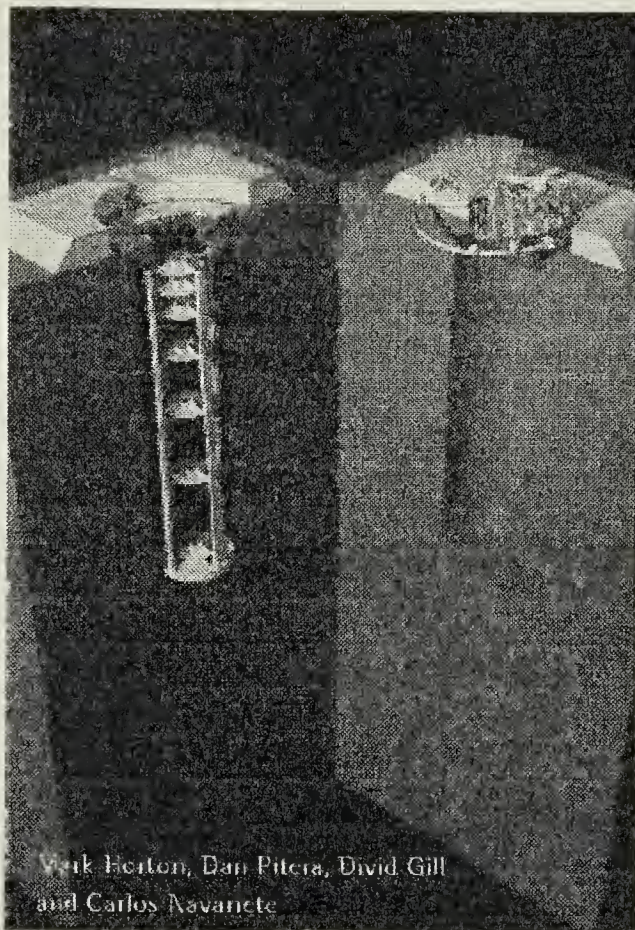
Project Atlas is funded  
by the Graham Foundation  
for Advanced Studies in the  
Fine Arts, the New York State  
Council on the Arts and  
individual contributors. An  
individual grant from the  
National Endowment for  
the Arts made the research  
and documentation of these  
abandoned missile bases  
possible.

**Credits**

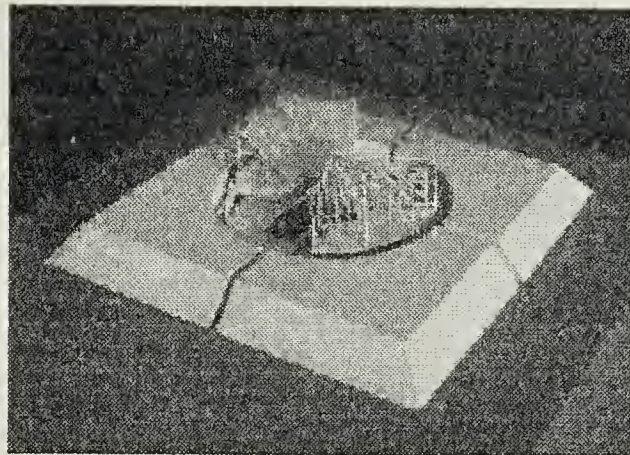
The following people and  
organizations have provided vital  
assistance and information to  
make Project Atlas possible.  
Ginger Allen, Feinberg Library,  
SUNY at Plattsburgh  
Helen Allen, Director of Clinton  
County Historical Association  
Patty Allen-Robert, Feinberg  
Library, SUNY at Plattsburgh  
George Barber, engineer  
Helen McCloud, Plattsburgh  
Press Republican  
Chevalier Machine Shop  
Jack Downs, Plattsburgh  
Press-Republican  
Elizabeth Folwell,  
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Collection, Feinberg Library,  
SUNY at Plattsburgh  
Timothy Troy,  
New York Public Library  
R. D. White, author of  
Our Silent Silos



## STOREFRONT FOR ART AND ARCHITECTURE

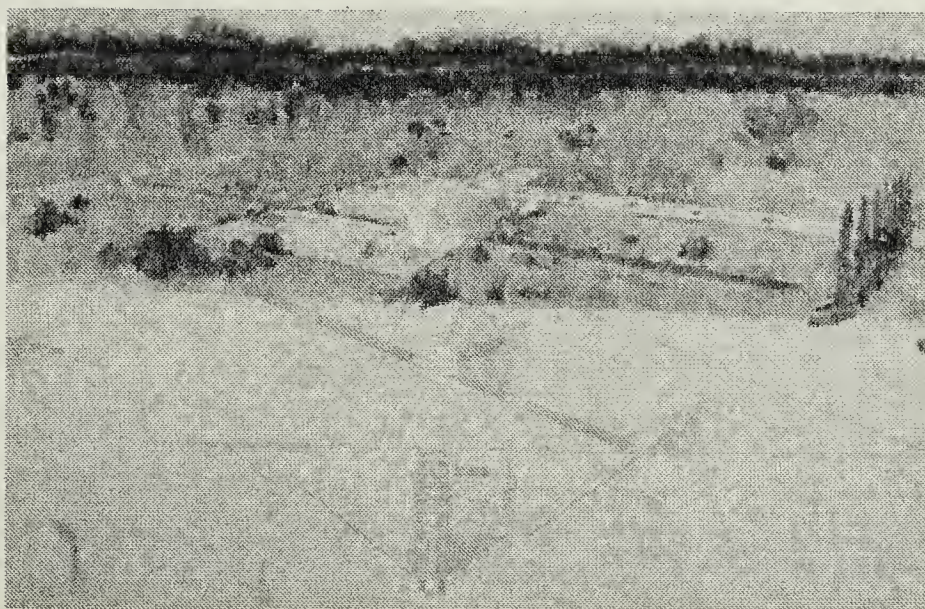


Mark Horton, Dan Pitera, David Gill  
and Carlos Navarrete



## Starling Keene

This proposal suggests that the site of this contemporary ruin be excavated and transformed to commemorate a perpetual present. The excavation is limited to two gestures: first, a slot is cut into the earth in which a stair travels from the surface again. The slot allows light and people to exist in the silo in unanticipated ways. Secondly, two thirds of the way down, the stair widens to reveal a quarter of the silo's form and to expose the tunnel (to the Launch Control Center) in the air as a bridge. The place that is made at this point becomes a theater in which the videotaped image of the audience (in the present) is projected against the side of the silo. By removing earth, the underground spaces of the missile network are given new meaning as forms in space; the only elements added to the site are a row of trees at the entrance to the stair, a pool of water to reflect the sky in the ground, and twelve concrete benches running parallel to the stair and collaged over the existing terrain. These benches are inscribed with the history of the missile project. This proposal seeks to reveal the continuity of the present moment in the passing of actual time.

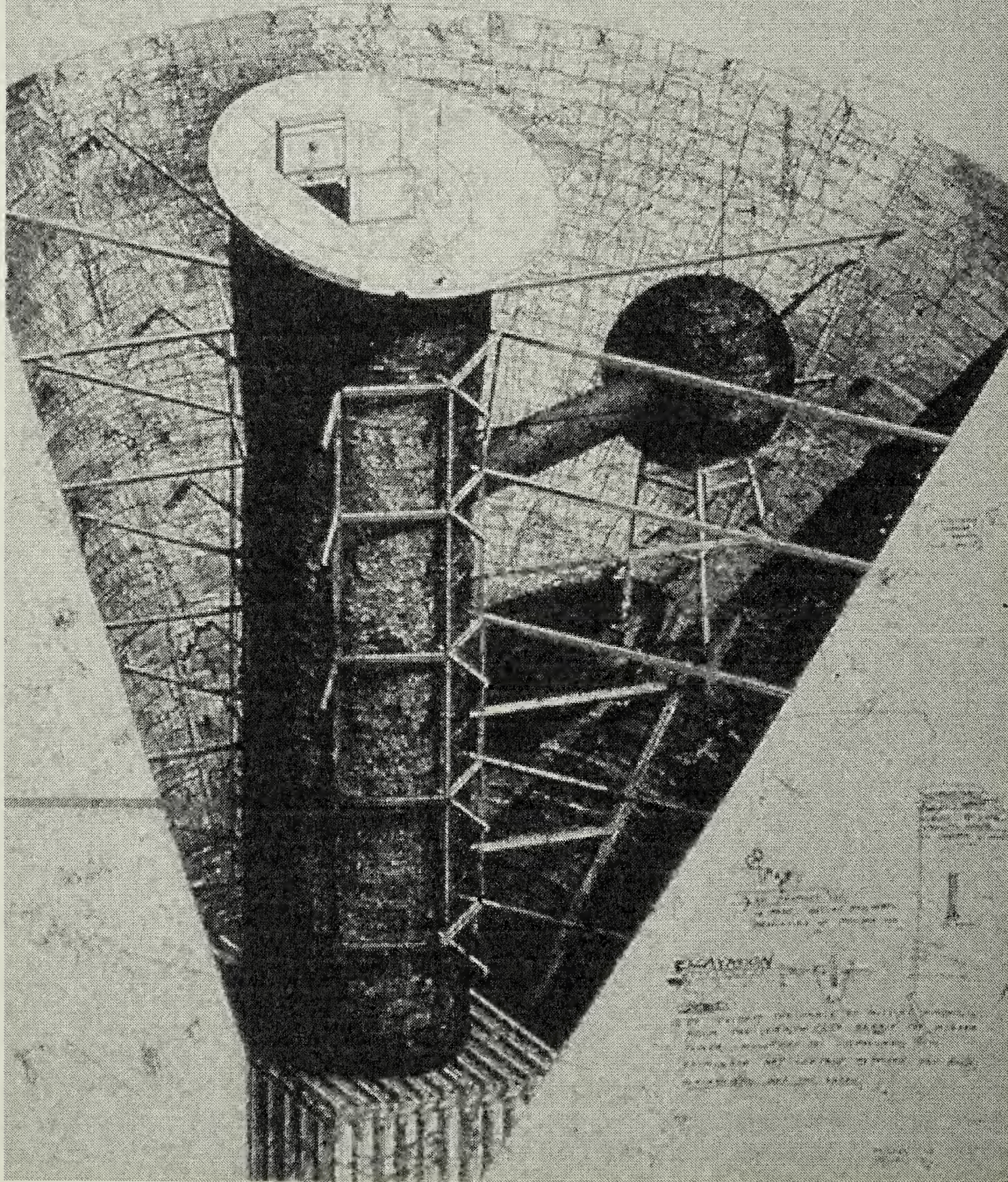




PROJECT ATLAS

Wellington Reiter

To destroy the image of missiles emerging from the earth, to expose the hidden tower, nullifying its usefulness, to eliminate any contact between the atlas mechanical and the earth.



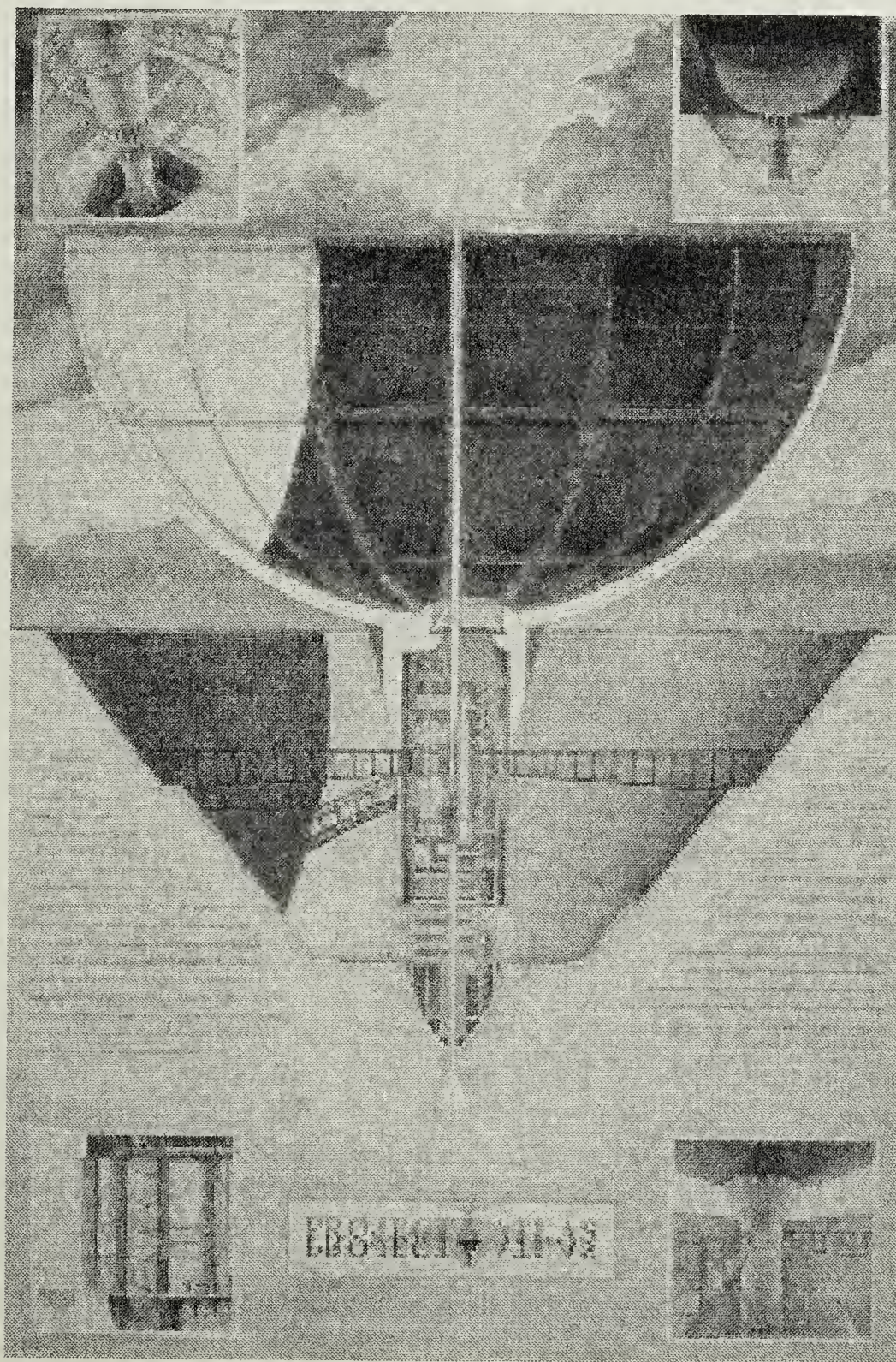


## STOREFRONT FOR ART AND ARCHITECTURE

Dan Willis with Merilee Meacock

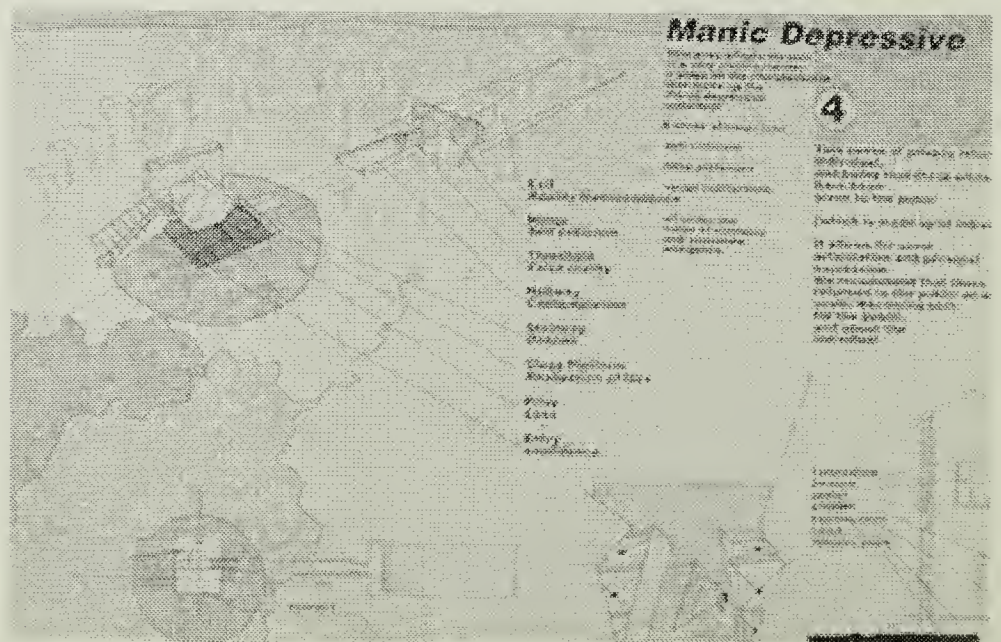
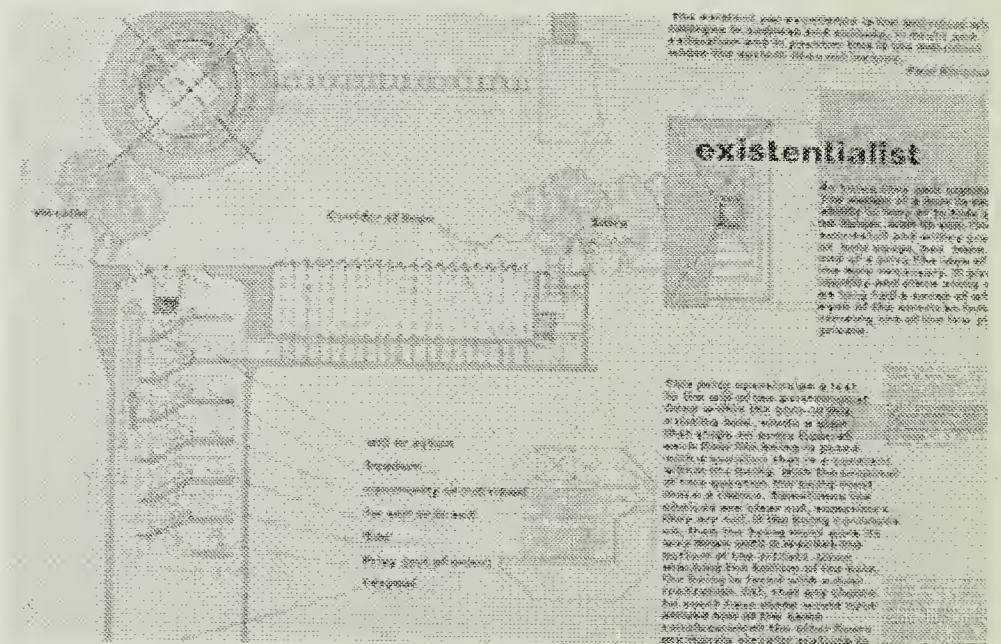
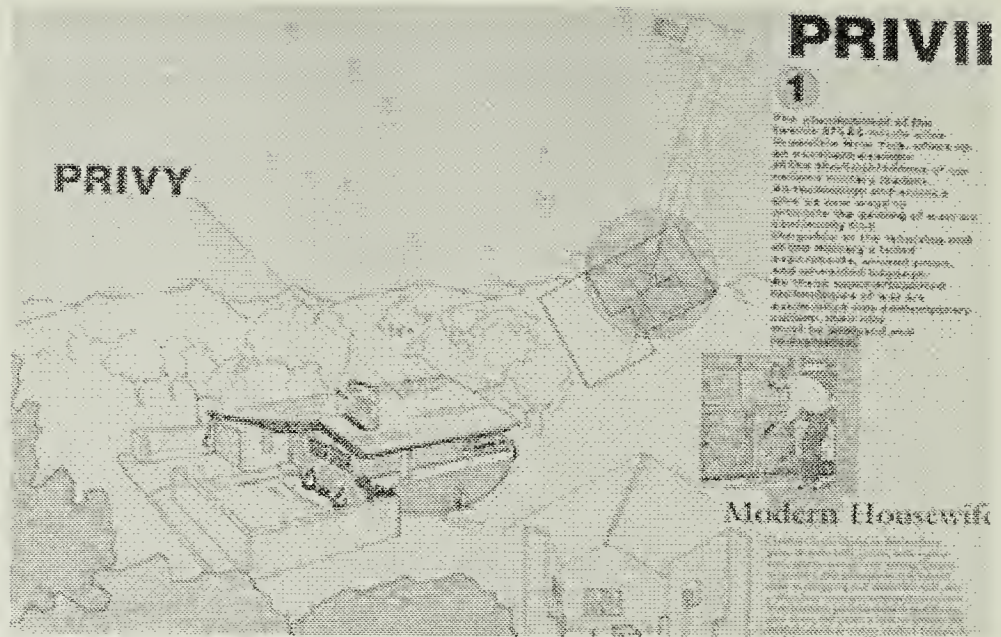
The structure of the missile silo itself reveals that it is a product of a curious, inverted reasoning: the silo is thickest at its top, becoming thinner as it goes deeper into the earth. Yet we know that all structures built in the earth's gravity, even those underground, endure the greatest stresses at their bottoms. It is only the fear of attack from above that justifies this unusual manner of building. And so the peculiar inversion again becomes evident--the sky, the source of life-giving light and rain--

--now becomes an agent of death... The resulting construction is top-heavy, monstrous, an affront to structural logic... for surely we were meant to stand upon the earth, not to carry its weight above us like the Atlas of myth. This "reflection" of our folly and our hopes also takes place within the silo in another manner: through the reading and discussion of poetry. The deepest level of the silo houses a collection of poetic writing of all languages, a reading room has been created at the level of a reflecting pool, and the entire silo provides ample opportunities for private discussion or secluded reveries.



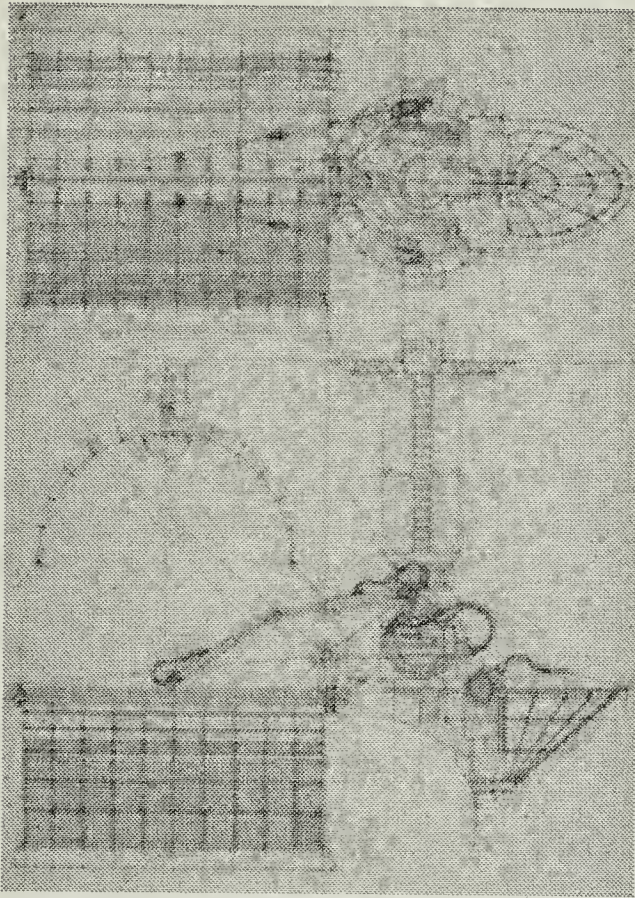


PROJECT ATLAS





## STOREFRONT FOR ART AND ARCHITECTURE

**BIOSPHERIC RESEARCH INSTITUTE**

David Ross Dike

## 1) Ideological Rational

This project forces upon us the realization that there exists a great conflict and contradiction within the basic human ideological constructive framework. This paradoxical dichotomy begins with the notion that humanity, whose most primal and instinctive ideological trait or faculty and prima facie right is that of "self preservation," tries to eliminate, violate, and disregard this very possibility of human reality by subjecting itself to the constant motion and threat of self-destruction through the means of a nuclear armageddon. This grave state of confusion in today's human thought has been realized and stimulated through the creation and misuse of nuclear science, which in its present developmental form serves as and represents humanities own means of self-destruction.

This absolutely ludicrous and fatalistic behavior, which has directed humanity into an anti-human orientation, has enticed me to investigate the possibilities of an architecture with the primary purpose to represent aesthetically the destructuring, and transformation of an architectural machine with the intrinsic purpose of annihilation and destruction into a constructive architectonic reality with true ideological

essence lying in the preservation of, rather than extinction and meaningless self sacrifice of all organic life. It is within these textural and linguistic relationships which exist between the contradiction and conflict of these basic ideological grounding that I have anchored my architectural premise. The main function and purpose of this new architectural discourse is to manipulate and balance the tensional dynamics between these basic polarities (i.e., extinction-survival, human-anti-human, etc.). It is my true belief that through viewing and analyzing the asymmetric dynamics of these inherent oppositions which as we know are created by and exist within the ideological frameworks discussed, have themselves provided the creative insight and stimulus for this project.

## 2) Building Purpose

This architectural construct shall exist as a "biospheric research institute." In essence, this fusion of architectural form with state-of-the-art building technologies, will serve as an earth sciences research facility, with the primary purpose and function being to monitor the earth's biospheric vital signs by functioning an earth-based information gathering system. This will be accomplished by receiving, processing, and analyzing the vast amounts of scientific data which will be gathered and produced by a highly advanced space monitoring system, called E.O.S. (Earth Observing System). The sole purpose of this system is to gather all the raw scientific data which is needed to depict a unified vision of the earth's biosphere.

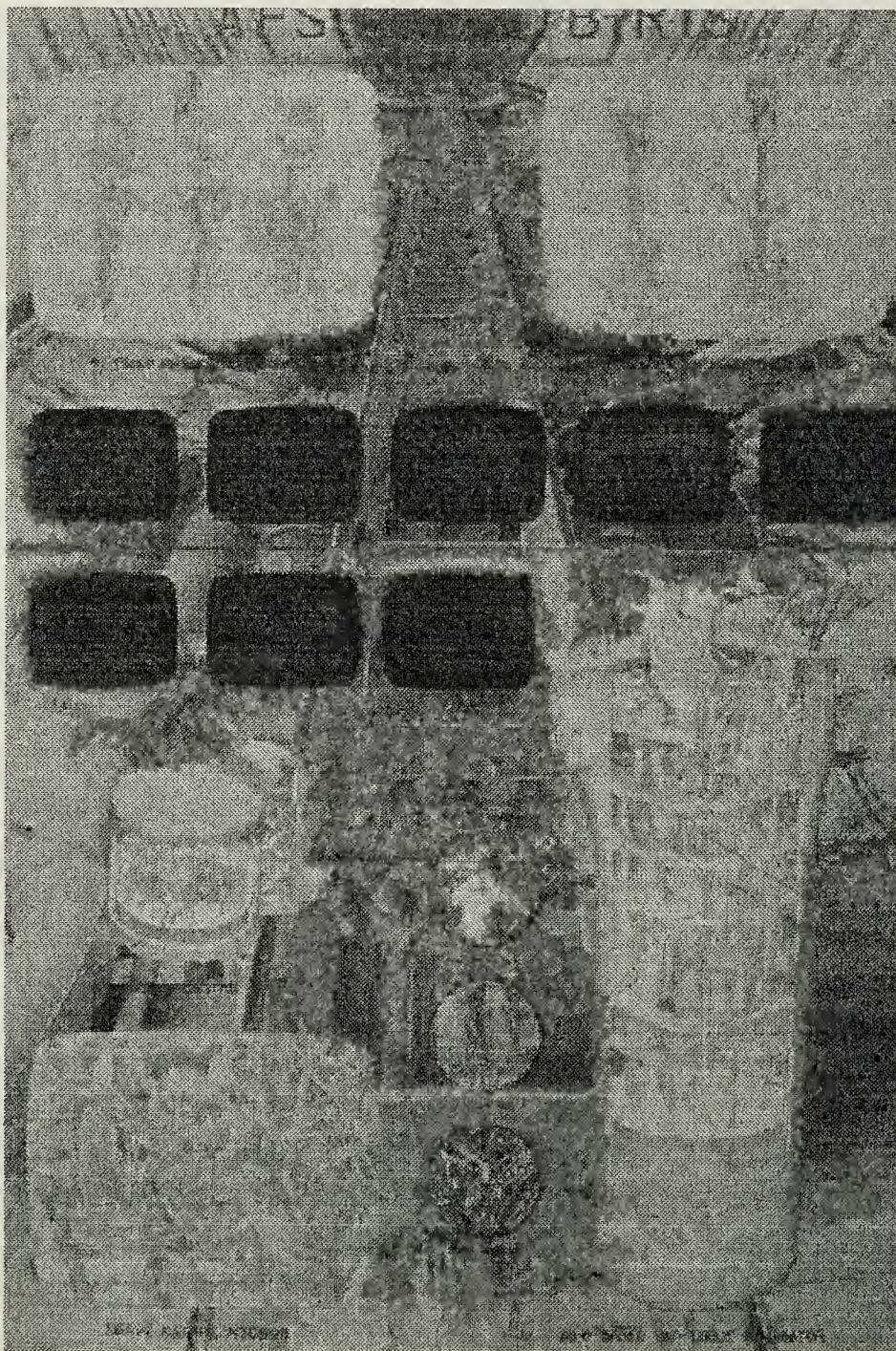


## PROJECT ATLAS

## AFS I-PD3 B-RIS

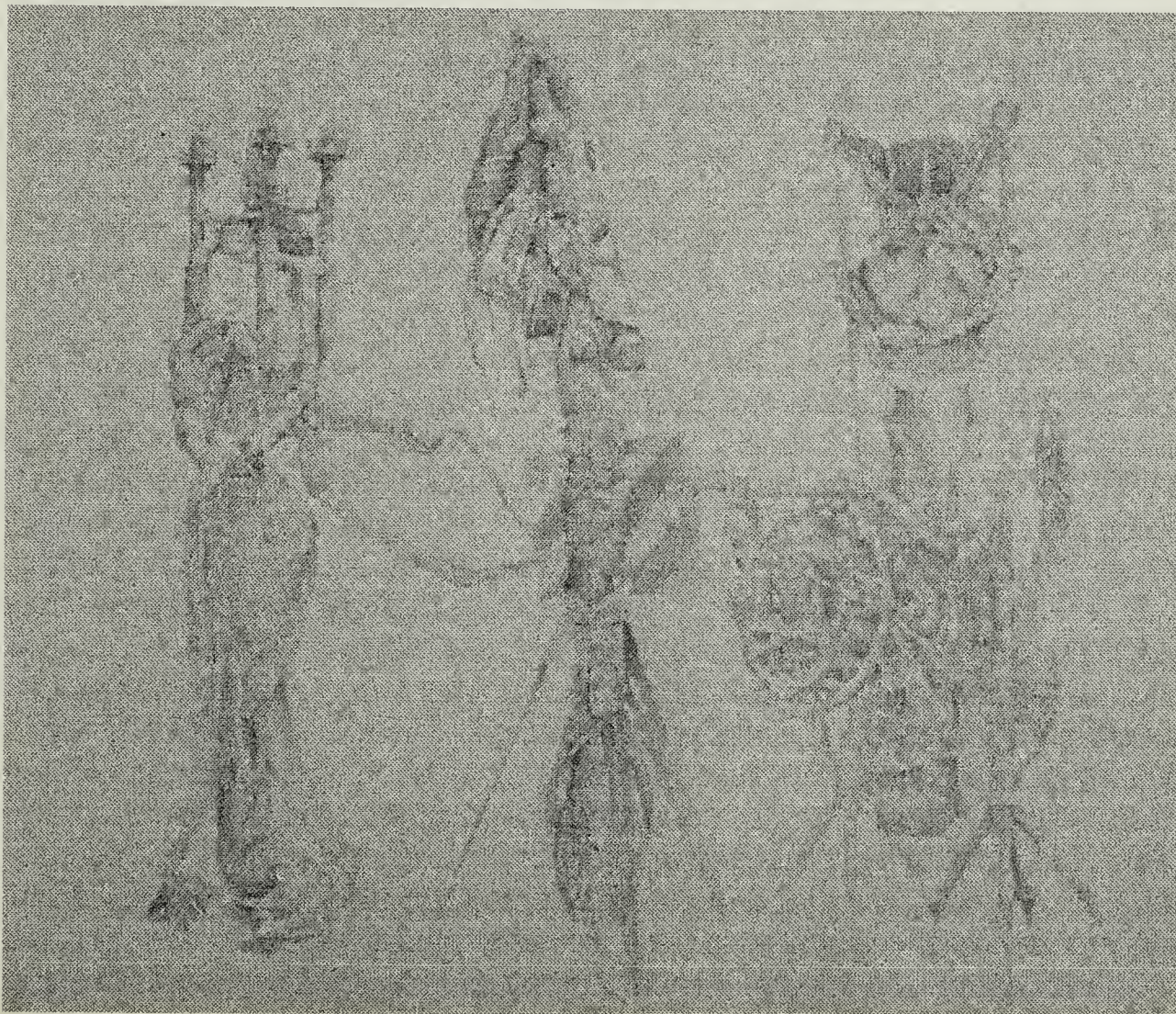
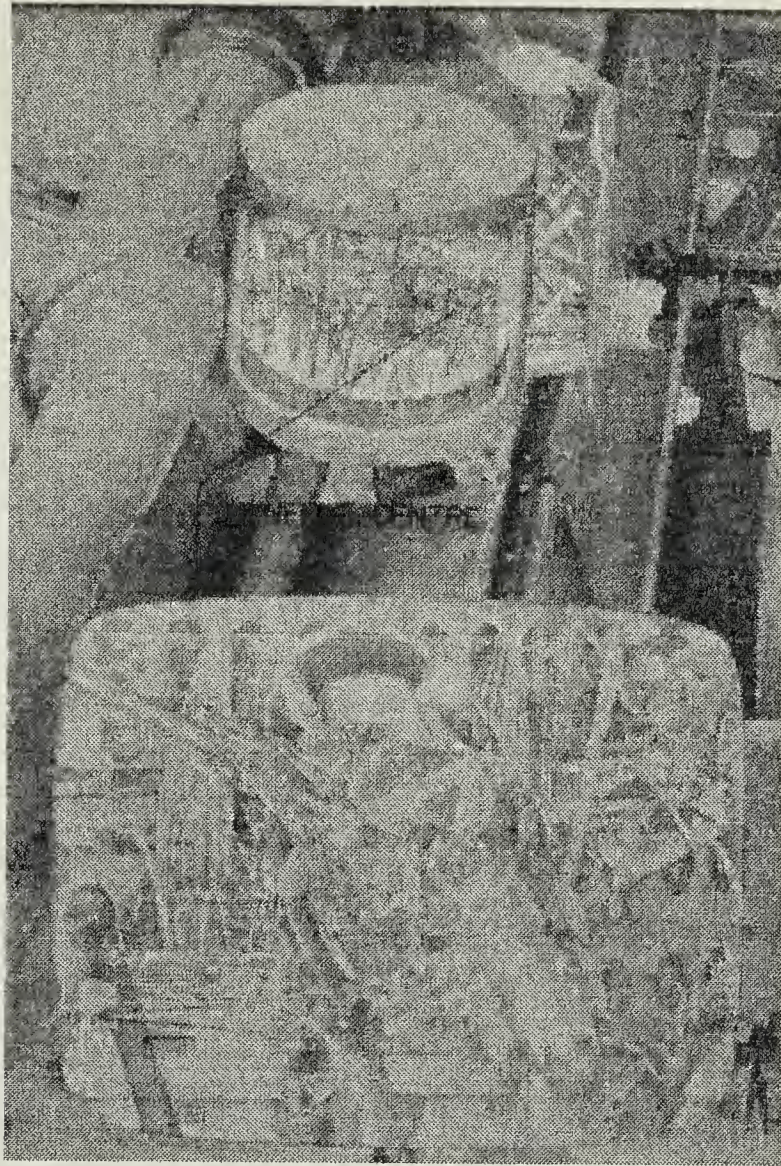
Mark West and Nada Subotincic

A SHORT HISTORY OF ENDO-THREAT DETECTION TECHNOLOGY (EnDT), AND THE EMERGENCE OF A CREDIBLE BIO-VIRO DEFENSE POSTURE IN AN ISO-PARANOIAC AGE OF GROWING ECO-LETHALITY: The end of the "Cold War" in early 1990 induced a very rapid decline of the PERCEIVED EXO-THREAT POTENTIAL. This Millennial "EXO-THREAT CRASH" produced a chronic condition of EXO-THREAT DECAY(ExTD) which has provoked continuous calls for reducing our DEFENSE POSTURE since that time . . . Despite this pioneering work resulting in the Breakthrough Production of a New Primary Threat (NPT), our capacity for perceiving ENDO-THREAT REALITIES has not kept pace with the rapid decay of traditional Exo-Threat potentials. This presents a





Window of Vulnerability we cannot ignore. We must continue to re-defend ourselves for each new threat we are able to perceive, AND WE MUST CONSTANTLY ENHANCE OUR CAPACITY TO PERCEIVE THE NEXT THREAT LONG BEFORE ITS ACTUAL ARRIVAL. . . The challenge of locating New Threat in an environment of Exo-Threat Decay and growing Eco-Lethality can be met by the rapid deployment of recently developed ADVANCED FULLY SENSATE ISO-PARANOIAC DETECTION DETERMINATION AND DELIVERY BIO-RESPONSE INTEGRATED SYSTEMS. AFS I-PD3 B-RIS can provide us with the Margin of Safety demanded by our current period of UNCERTAIN THREAT LOCATION and INCREASING ECO-LETHALITY, and provide defensive capabilities beyond our current, and dangerously limited, Threat Perception Horizon.





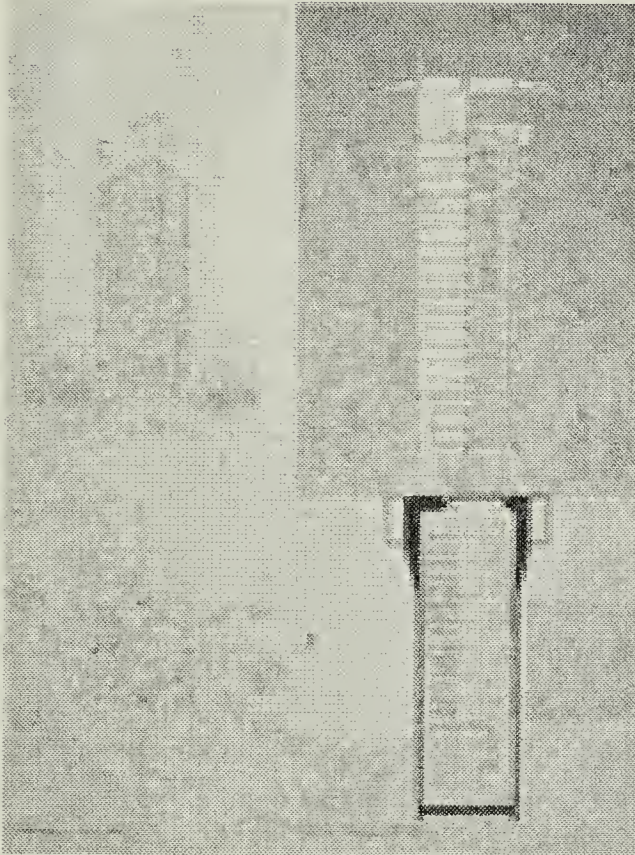




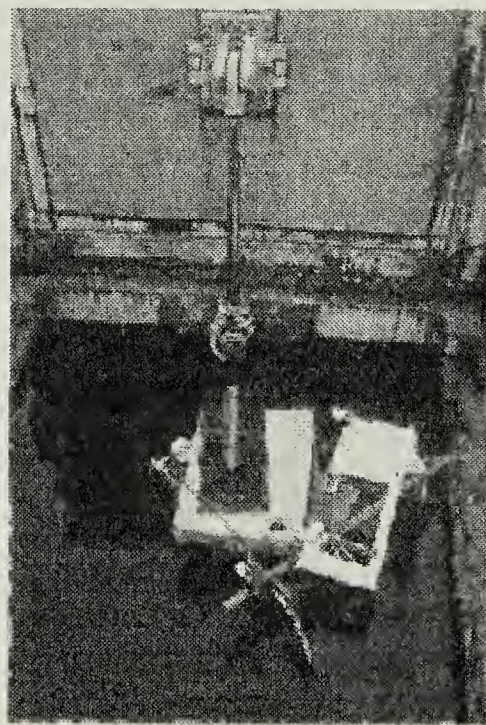
## STOREFRONT FOR ART AND ARCHITECTURE

## OBSIDIUM

James Langford with Sandi Hubbard



To deter means to prevent or discourage from acting by means of fear, and the fear associated with a nuclear first strike is the promise of reprisal in kind. Deterrence theory, in order to be effective, requires a genuine willingness to use nuclear weapons. At present with improving relationship between the superpowers, talk of cutting military spending, we continue to develop new generation of military technologies. Deterrence policy, which has kept the peace for decades, transforms human being into "mere means for the prevention of war. Unlike the strategy of the German officers during the Franco-Prussian War who forced civilians to ride on military trains in order to deter saboteurs, we are hostages who lead normal lives." Nevertheless, for most of us, the constant threat of destruction is subtle and imperceptible because "we are not restrained in any way — there is no direct physical violations of our rights." Existentially, we live in a kind of obsidium, a state or condition of being held as a hostage. The transformation of the Adirondack missile silo is intended to express this historical state of obsidium. As an arcadian retreat for metropolitan dwellers, the proposed towers in structural steel framing, fireproof encased in aluminum, would be constructed directly over the silo. Their perimeter shear connections would allow 24" sway on top floor in 50 mph wind, and the existing rocket elevator would be modified as automobile turntable for underground parking for 30 cars within the silo. Linear lighting would be inlaid on the ground, in accordance to target sighting to indicate pathways to the towers.





PROJECT ATLAS

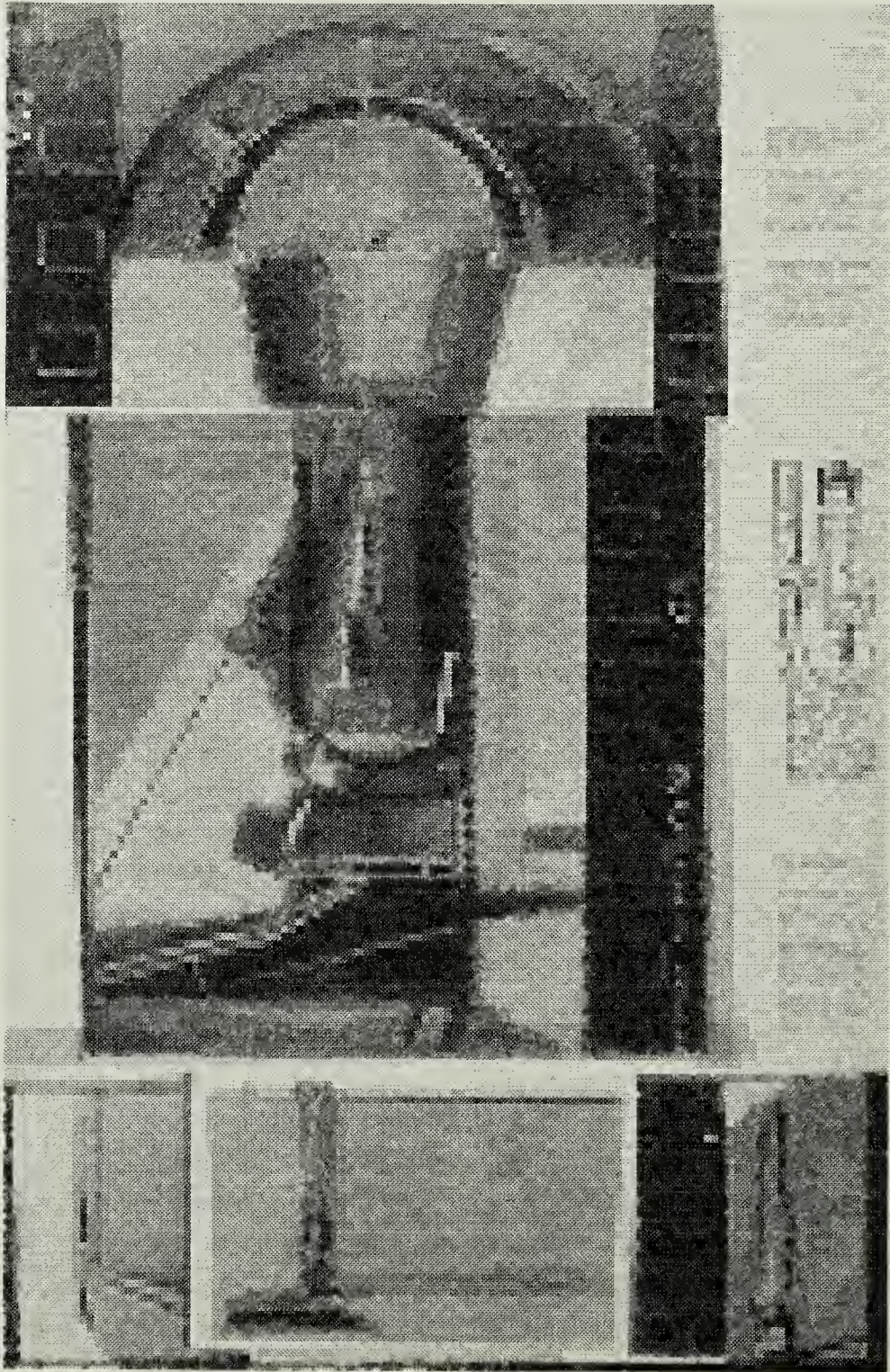
Shane O'Neil

(RE)-INSTRUMENTALIZING THE ARTIFACT

The missile silos here relinquishes its function as an active object of instrumentalized technology, to reemerge as the dysfunctional vessel of aesthetic pleasure--A MUSICAL INSTRUMENT.

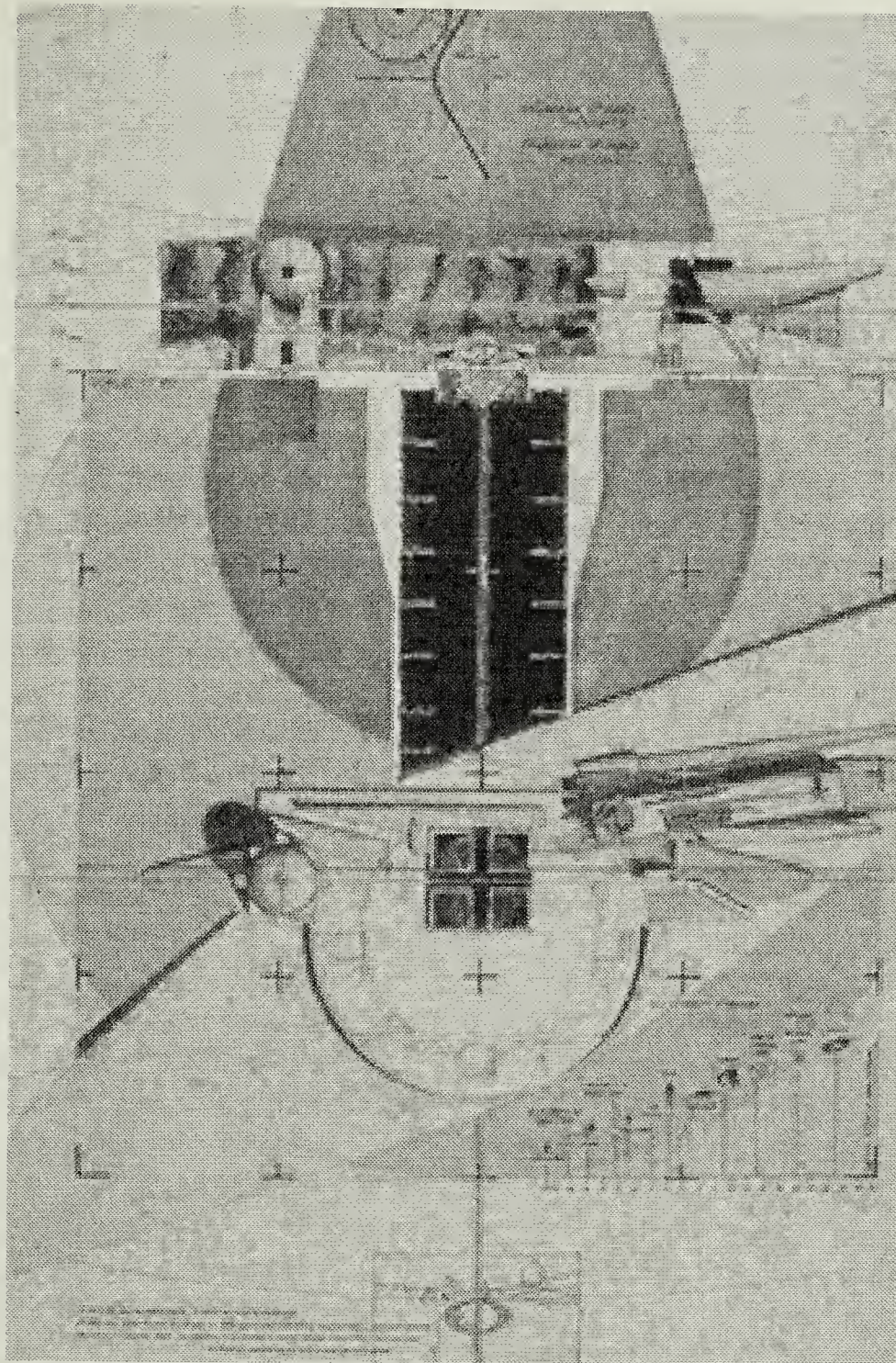
THE INSTRUMENT

The silo is host to the insertion of a flue-pipe apparatus activated by either wind or forced air currents. This in turn produces resonate vibrations between a conducting stylus and diaphragm.





STOREFRONT FOR ART AND ARCHITECTURE



Joey N. Shimoda

CONSIDER: Missile silo as ANCHOR

PROPOSAL: The 12 abandoned silos surrounding the Plattsburgh Air Force Base as the first such anchors for: GLOBAL TENSION RINGS. A cable, suspended 20 feet in the air, is wrapped around the world as a 3-dimensional meridian or parallel. It is supplemented periodically by cable support stations. Each TENSION RING becomes a heuristic device that denotes mental and physical distance and position. Symbolically, it affirms man's desire toward survival: a gesture of holding together rather blowing apart. Further levels of significance are determinate on the observer. (clothesline or tight rope?)



## PROJECT ATLAS

**A SOLAR ELECTRIC POWER PLANT,  
NATURAL ENERGY FOR PEACE**

Jeff Schofield

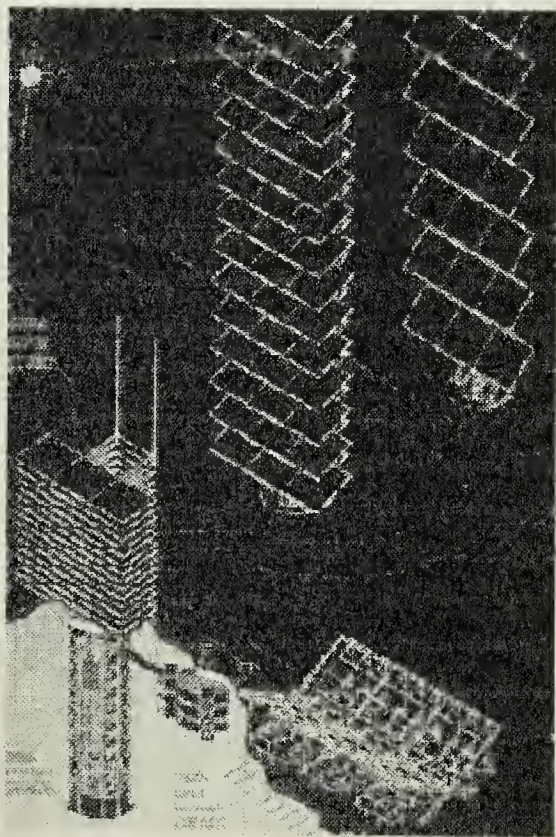
The abandoned nuclear missile silos will serve as foundations for large photo voltaic panels which provide direct current to drive electric generating turbines installed inside the existing buried structures. The high-voltage alternating current thus produced is fed to a new switchyard extending from the power plant, where it is branched into underground electric cables serving the entire region with clean energy for peaceful development. This new civilian application is even more technologically sophisticated than the original military design for the silos, and proposes instead an energy source responsive to natural phenomena, providing a sane alternative to nuclear power as currently produced both for war and for peace.

The photo voltaic panels that power this new generating plant are mounted on an articulated steel structure, which in turn is attached with a new lift arm to the existing lift platform and counterweight inside the silo. This mechanism raises and lowers the solar panel array above to follow the sun's path each day. Like a tree expanding its leaves to catch all the available sunlight, the panels slowly spread upward each morning as the sun rises in the sky. At noon the array reaches its highest extension for that day, with no panel casting its shadow on the one below. The panels' inclination changes, too, but not always facing directly toward the sun; while photo voltaic panels must have their entire surface exposed to light in order to operate at peak

efficiency, they can do so at any angle to the sun. The panels slowly descend with the afternoon sun, like a flower closing its petals, and rest in their most contracted position during the night.

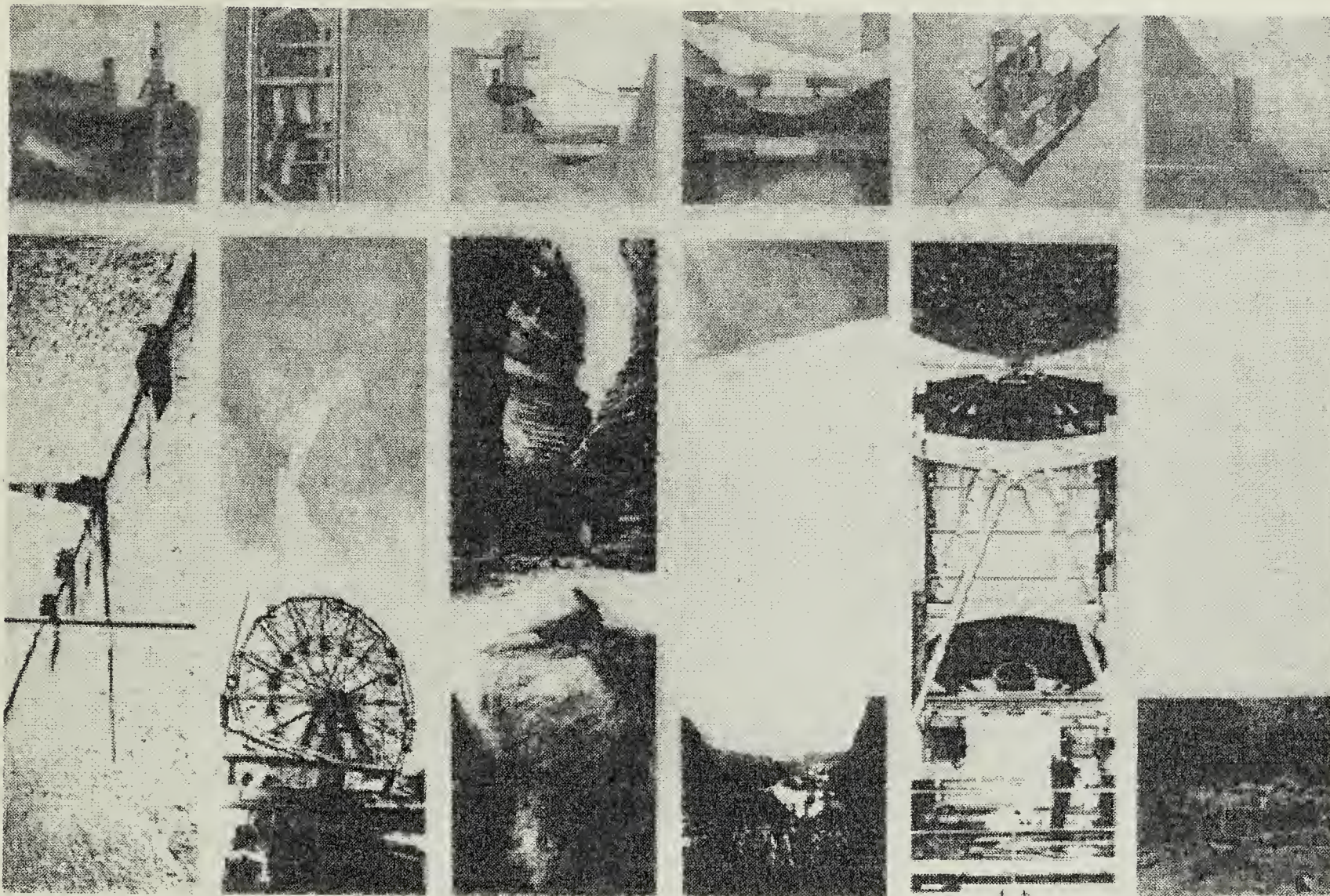
The existing silo below contains computers programmed to guide the different solar panel extensions required for each day of the year. Direct electrical current from the solar panels is fed into storage batteries installed on the existing steel platforms inside the silo. This electrical charge is connected via the tunnel to magnets that spin three large electric turbines installed on the existing steel platform inside the silo. This electrical charge is connected via the tunnel to magnets that spin three large electric turbines installed in the former control silo. These new copper turbines generate an alternating current of high-voltage electricity, which is then stepped down by transformers in a new switchyard located next to the power generating facility. Here the electricity is finally branched out to a series of underground cables serving clean raw power to the surrounding region, which can be used for peaceful development of the countryside.

This proposal seeks to maintain the uniquely functional and highly technocratic character of the original silo design and to promote an understanding of man's relationship with nature. The new power plant functions in harmony with natural phenomena and reaffirms the positive aspects of human progress, especially those in the realm of technology, which can indeed be used for the benefit of society.





## STOREFRONT FOR ART AND ARCHITECTURE

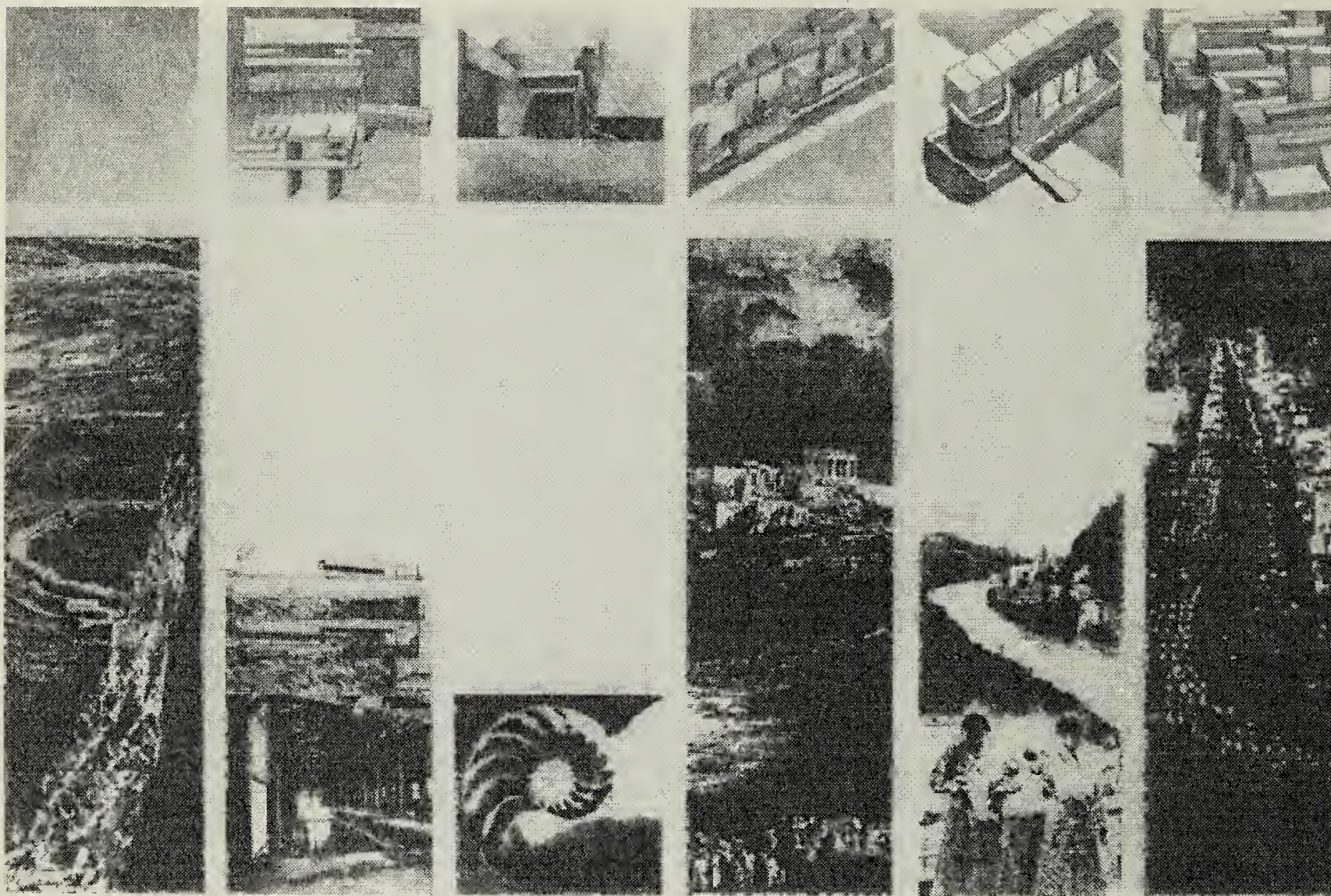


## Reenie Elliott

BIRTH OF THE MISSILE . . . 2000 AD . . . FOR 40 YEARS 12 MISSILE SILOS HAVE BEEN THE REPOSITORY OF HUMAN FEARS AND EMOTIONS ON A GLOBAL SCALE. THE INTENSITY ESCALATES UNTIL THE CONCRETE WALLS OF THE SILOS TREMBLE. THEY CONTAIN THE FORCES OF LIFE AND DEATH, COMEDY AND TRAGEDY, HOPE AND FEAR, AMBITION AND RESIGNATION. GRADUALLY, THE MOLECULAR STRUCTURE OF THE SILOS IS ALTERED. BLISTERS OF HUMANITY APPEAR ON THE SURFACE OF THE WALLS AND SPREAD THROUGH THE BODY OF THE SILO. EVENTUALLY IT IS NO LONGER POSSIBLE TO TELL WHETHER IT IS MOSTLY MAN OR MACHINE . . . IN IMITATION OF THE HUMAN DRAMA THEY HAVE WITNESSED, THEY PLOT TO DESTROY EACH OTHER. AT THE LAST MINUTE, THEY SEE THE FUTILITY OF THEIR ACTIONS AND DIVERT THE MISSILES TO THE FARTHEST REACHES OF OUTER SPACE . . . FILLED WITH REMORSE, THEY VOW TO ATONE FOR THE SINS OF HUMANITY. THEY HAVE DENIED THEIR POTENCY, THEY ARE EUNUCHS OF THE SCIENTIFIC AGE. THEY ARE PROPHETS WHO WILL PROMOTE VALUES ANTITHETICAL TO THOSE THEY NOW REPRESENT. THEY WILL BECOME PRIESTS IN HUMBLE ATTIRE . . . ONE NIGHT, THEY UPROOT THEMSELVES FROM THE PLATEAU AND MIGRATE ACROSS LAND AND SEA, EACH ONE FOLLOWING HIS OWN VISION.



## PROJECT ATLAS



(descriptive text under the  
sixth column of images)

## PERSONAL MISSION:

Propose Mystical / Spiritual as antidote to Scientific

## CHOSEN LOCATION:

St. Catherine Monastery, Mount Sinai. Burning Bush.

## PROGRAM:

Bell Tower

## SOURCE DATA:

"In other parts of Africa, you are aware of the earth beneath your feet . . . In North Africa you find yourself constantly raising your eyes to look at the sky. In the arid landscape the sky is the final arbiter." (Paul Bowles)

"Mysticism and exaggeration go together. A mystic must not fear ridicule if he is to push all the way to the limits of humility or the limits of delight. St. Theresa smiled through her agony . . . death is an integral part of joy that only men are afraid of, miserably dependent as they are on their 'petty egos and petty power . . . when moaning, a person chains himself to the immediate present of his suffering body (and lies completely outside past and future), and in this ecstatic laughter he loses all memory, all desire, cries out to the immediate present of the world, and needs no other knowledge." (Milan Kundera)

(descriptive text under the  
twelfth column of images)

## PERSONAL MISSION:

Deny omnipotence of logic.

Instill belief in luck, the irrational.

Dispel scientific urge to define all limits in an irrational world.

## CHOSEN LOCATION:

Las Vegas

## PROGRAM:

Gambling Casino. Created by humanity to destroy humanity, missile silo is irrational. Yet is most sophisticated product of logical scientific endeavor.

## SOURCE DATA:

"Some things about Vegas stay the same, though. People have always talked a lot about God there. 'Oh God, just this one time,' people say; 'Oh God, let me get this number.' The guy who's saying this never stops to think, 'I'm here with some woman who's not my wife, ignoring my children, and betting with my brother-in-law's savings'. They never look at things objectively and say, 'If there was a God, would he pay attention to a low life bastard like me?' (Jackie Mason)

"... tortured misunderstandings between official's and popular culture, between elitist taste and popular imagination . . . The debate is a dress rehearsal of the arguments respectable culture will mobilize to denigrate it's probable replacement: the potentially sublime is criticized for being cheap and unreal." (Rem Koolhaas)